

"Express Mail" mailing label number EL 743 379 390 US. I hereby certify that this document and referenced attachments are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10, addressed to: Commissioner for Patents, Box Patent Application, Washington, D.C. 20231 on 3-30-01

By: Nancy Ramos Printed: Nancy Ramos



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Tang et al.

Title: HUMAN MEMBRANE-SPANNING PROTEINS

Serial No.: To Be Assigned

Filing Date:

To Be Assigned

Examiner: To Be Assigned

Group Art Unit:

To Be Assigned

Commissioner for Patents
Box Patent Application
Washington, D.C. 20231

SUBMISSION UNDER 37 CFR § 1.821-1.825 OF SEQUENCE LISTING

Sir:

With respect to the filing of the instant **CONTINUATION** application under 37 CFR 1.53(b) of pending prior application Serial No. 09/039,307, filed on March 13, 1998, originally entitled HUMAN MEMBRANE SPANNING PROTEINS, Applicants hereby submit a paper copy of the "Sequence Listing" as disclosed in the application.

Furthermore, in accordance with the requirements of 37 CFR §§ 1.821-1.825, Applicants hereby submit one (1) diskette containing the computer-readable information for the "Sequence Listing" of the above-identified application. The diskette complies with the requirements of 37 CFR § 1.824 and is IBM PC compatible using a UNIX operating system with PERL Program.

The content of the "Sequence Listing" paper copy is identical to the computer readable copy, as required under 37 CFR § 1.821(f).

Applicants respectfully point out that the Sequence Listing being submitted with the instant continuation application differs from the Sequence Listing filed with the parent utility application, in that the instant Sequence Listing includes an additional polypeptide sequence, labeled as SEQ ID NO:8. The polynucleotide sequence encoding the polypeptide sequence of SEQ ID NO:8 is included in the instant Sequence Listing as SEQ ID NO:25. Applicants submit that the inclusion of this polypeptide sequence does not constitute new matter, as this polypeptide sequence is encoded by a polynucleotide sequence disclosed in the parent utility application (labeled therein as SEQ ID NO:24). The Examiner's attention is directed to *Ex parte Ayers and Scott*, 108 USPQ 444 (BPAI 1955), in which the Board found that:

If a statement of a so-called inherent property of a material is to be added to an application after filing, without raising the charge of new matter, it must be a property which would be obvious to those skilled in the art from the very nature of the material.

Applicants submit that the polypeptide sequence of SEQ ID NO:8 is inherent to the polynucleotide sequence now indicates as SEQ ID NO:25 (misabeled as SEQ ID NO:24 in the Sequence Listing of the parent application), and that the polypeptide sequence of SEQ ID NO:8 would be obvious to one of skill in the art, based on the polynucleotide sequence of SEQ ID NO:25 and the disclosure in the specification of the parent application. Specifically, it was disclosed in the parent application that MSP-8 is encoded by the polynucleotide of SEQ ID NO:25 (p. 29, lines 7-13); MSP-8 is 914 amino acids in length (p. 29, line 15); MSP-8 has eight potential N glycosylation sites at residues N503, N585, N770, N804, N810, N831, N836, and N890 (p. 29, lines 15-17); MSP-8 has two potential cAMP- and cGMP-dependent protein kinase phosphorylation sites at residues T211 and T286 (p. 29, lines 17-18); MSP-8 has twelve potential casein kinase II phosphorylation sites at residues T87, S245, S271, S364, S366, T411, T597, T652, T663, S795, T870, and S876 (p. 29, lines 18-19); MSP-8 has one potential glycosaminoglycan attachment site at residue S477 (p. 29, line 20); MSP-8 has thirteen potential protein kinase C phosphorylation sites at residues T68, T84, T98, T207, T232, S366, S483, T563, T580, T594, T597, T601, and S672 (p. 29, lines 20-22); and MSP-8 has eleven cysteine residues at residues C125, C187, C200, C205, C210, C223, C250, C267, C308, C386, and C421 (p. 29, lines 25-26). Based on these disclosed characteristics of MSP-8, one of skill in the art would know that MSP-8 has the polypeptide sequence of SEQ ID NO:8. Since the polypeptide

sequence of SEQ ID NO:8 was inherently disclosed in the parent application, Applicants respectfully submit that inclusion of this polypeptide sequence with the instant continuation application would not be new matter.

Furthermore, with the submission of the instant continuation application, Applicants are correcting an unintentional and obvious error in the parent application. This unintentional and obvious error was the omission of the polypeptide sequence of SEQ ID NO:8 in the parent Sequence Listing, although it was clearly referenced in the parent and instant specifications. As a result of this omission, the polypeptide and polynucleotide sequences of SEQ ID NO:9-34 were mislabeled as sequences SEQ ID NO:8-33 in the parent application. Based on the disclosures of the polypeptide sequences of SEQ ID NO:1-17 (pages 23 through 36), encoded by the polynucleotide sequences of SEQ ID NO:18-34, it would be obvious to one of skill in the art that the polypeptide sequence of SEQ ID NO:8, encoded by the polynucleotide sequence of SEQ ID NO:25 (mislabeled as SEQ ID NO:24 in the parent application), was missing from the Sequence Listing submitted with the parent application. Furthermore, it would be obvious to one of skill in the art that the polypeptide erroneously labeled as SEQ ID NO:8 in the parent application was actually MSP-9, based on the disclosure of MSP-9 in the specification of the parent application, and that this polypeptide was encoded by the polynucleotide sequence erroneously labeled as SEQ ID NO:25 in the parent application. Likewise, the correct identities of each of the sequences mislabeled as SEQ ID NO:8-33 in the parent application would be obvious to one of skill in the art. Applicants further note that the sequences of the Sequence Listing are identified by a Clone ID, and that the correct Clone IDs are disclosed in Table 1 on p. 24 of the parent application. Thus, it would be obvious to one of skill in the art that the Sequence Listing was missing the sequence of the polypeptide of Clone ID 1737775, disclosed as being MSP-8. Furthermore, one of skill in the art would find it routine to determine which of the sequences disclosed in the Sequence Listing of the parent application corresponded to each of the polypeptide and polynucleotide sequences disclosed in the specification.

The U.S. Court of Customs and Patent Appeals has found that the correction, in a subsequently filed application, of an error that is obvious to one of skill in the art, is not a bar to according the benefit of the parent patent application, *Riester v. Kendall* (CCPA 1947) 159 F2d 732, 72 USPQ 481. Therefore, Applicants submit that submission of the corrected Sequence

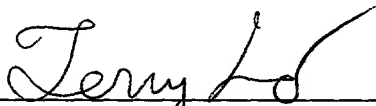
Listing in the instant continuation application does not constitute the entry of new matter, and that the instant continuation application should properly have the benefit of the parent patent application.

Thus, in accordance with the requirements of 37 CFR §§ 1.821-1.825, Applicants hereby submit the paper copy and computer-readable copy of the Sequence Listing, containing the sequences disclosed in the parent and instant applications. Any questions regarding this communication may be directed to the undersigned at (650) 845-4639 or (650) 621-8581.

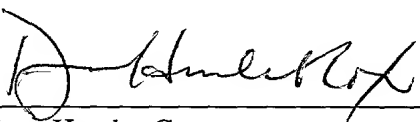
Applicants believe that no fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Deposit Account No. 09-0108. **This form is enclosed in duplicate.**

Respectfully submitted,
INCYTE GENOMICS, INC.

Date: March 30, 2001.


Terence P. Lo, Ph.D.
Limited Recognition (37 C.F.R. § 10.9(b)) attached
Direct Dial Telephone: (650) 621-8581

Date: 30 March 2001


Diana Hamlet-Cox
Reg. No. 33,302
Direct Dial Telephone: (650) 845-4639

3160 Porter Drive
Palo Alto, California 94304
Phone: (650) 855-0555
Fax: (650) 849-8886

PF-0489-1 CON

<110> Tang, Y. Tom
Bandman, Olga
Lal, Preeti
Hillman, Jennifer L.
Yue, Henry
Corley, Neil C.
Guegler, Karl J.
Kaser, Matthew R.
Baughn, Mariah R.
Shah, Purvi

<120> HUMAN MEMBRANE-SPANNING PROTEINS

<130> PF-0489-1 CON

<140> To Be Assigned

<141> Herewith

<150> 09/039,307

<151> 1998 March 13

<160> 34

<170> PERL Program

<210> 1

<211> 238

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 77138

<400> 1

Met	Leu	Thr	Pro	Leu	Gly	Lys	Phe	Ser	Thr	Ala	Lys	Phe	Ala	Val
1				5					10					15
Arg	Leu	Pro	Arg	Val	Trp	Glu	Ala	Arg	Ala	Pro	Ser	Leu	Ser	Gly
				20					25					30
Ala	Pro	Ala	Pro	Thr	Pro	Pro	Ala	Pro	Pro	Pro	Ser	Arg	Ser	Ser
				35					40					45
Arg	Leu	Gly	Leu	Trp	Pro	Arg	Cys	Phe	Leu	Ile	Phe	Pro	Gln	Leu
				50					55					60
Arg	Ile	Leu	Leu	Leu	Gly	Pro	Gln	Glu	Ser	Asn	Asn	Ser	Thr	Gly
				65					70					75
Thr	Met	Trp	Lys	Val	Ser	Ala	Leu	Leu	Phe	Val	Leu	Gly	Ser	Ala
				80					85					90
Ser	Leu	Trp	Val	Leu	Ala	Glu	Gly	Ala	Ser	Thr	Gly	Gln	Pro	Glu
				95					100					105
Asp	Asp	Thr	Glu	Thr	Thr	Gly	Leu	Glu	Gly	Gly	Val	Ala	Met	Pro
				110					115					120
Gly	Ala	Glu	Asp	Asp	Val	Val	Thr	Pro	Gly	Thr	Ser	Glu	Asp	Arg
				125					130					135
Tyr	Lys	Ser	Gly	Leu	Thr	Thr	Leu	Val	Ala	Thr	Ser	Val	Asn	Ser
				140					145					150
Val	Thr	Gly	Ile	Arg	Ile	Glu	Asp	Leu	Pro	Thr	Ser	Glu	Ser	Thr
				155					160					165
Val	His	Ala	Gln	Glu	Gln	Ser	Pro	Ser	Ala	Thr	Ala	Ser	Asn	Val
				170					175					180
Ala	Thr	Ser	His	Ser	Thr	Glu	Lys	Val	Asp	Gly	Asp	Thr	Gln	Thr
				185					190					195
Thr	Val	Glu	Lys	Asp	Gly	Leu	Ser	Thr	Val	Thr	Leu	Val	Gly	Ile

PF-0489-1 CON

Ile Val Gly Val	200	Leu Leu Ala Ile Gly	205	Phe Ile Gly Gly Ile	210
	215		220		225
Val Val Val Met	Arg Lys Met Ser Gly	230	Arg Tyr Ser Pro	235	

<210> 2
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1381884

<400> 2
Met Met Val Thr Val Val Leu His Leu Ala Phe Gly Gln Arg Leu
1 5 10 15
Ile Asp Phe Ser His His His Thr Val Ser Asn Ile Leu Phe His
20 25 30
Cys Ala Leu Ile Leu Cys Lys Lys Glu Pro Gly Ala Lys Ile Ser
35 40 45
Arg Gly Ala Lys Gly Lys Lys Glu Glu Lys Gln Glu Ala Gly Lys
50 55 60
Glu Gly Thr Ala Pro Ser Glu Asn Gly Glu Thr Lys Ala Glu Glu
65 70 75
Val Leu Ser Ile Asn Thr Ser His
80

<210> 3
<211> 515
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1427590

<400> 3
Met Ala Ala Ala Gln Glu Ala Asp Gly Ala Arg Ser Ala Val Val
1 5 10 15
Ala Ala Gly Gly Gly Ser Ser Gly Gln Val Thr Ser Asn Gly Ser
20 25 30
Ile Gly Arg Asp Pro Pro Ala Glu Thr Gln Pro Gln Asn Pro Pro
35 40 45
Ala Gln Pro Ala Pro Asn Ala Trp Gln Val Ile Lys Gly Val Leu
50 55 60
Phe Arg Ile Phe Ile Ile Trp Ala Ile Ser Ser Trp Phe Arg Arg
65 70 75
Gly Pro Ala Pro Gln Asp Gln Ala Gly Pro Gly Gly Ala Pro Arg
80 85 90
Val Ala Ser Arg Asn Leu Phe Pro Lys Asp Thr Leu Met Asn Leu
95 100 105
His Val Tyr Ile Ser Glu His Glu His Phe Thr Asp Phe Asn Ala
110 115 120
Thr Ser Ala Leu Phe Trp Glu Gln His Asp Leu Val Tyr Gly Asp
125 130 135
Trp Thr Ser Gly Glu Asn Ser Asp Gly Cys Tyr Glu His Phe Ala
140 145 150
Glu Leu Asp Ile Pro Gln Ser Val Gln Gln Asn Gly Ser Ile Tyr
155 160 165

PF-0489-1 CON

Ile His Val Tyr Phe Thr Lys Ser Gly Phe His Pro Asp Pro Arg
170 175 180
Gln Lys Ala Leu Tyr Arg Arg Leu Ala Thr Val His Met Ser Arg
185 190 195
Met Ile Asn Lys Tyr Lys Arg Arg Arg Phe Gln Lys Thr Lys Asn
200 205 210
Leu Leu Thr Gly Glu Thr Glu Ala Asp Pro Glu Met Ile Lys Arg
215 220 225
Ala Glu Asp Tyr Gly Pro Val Glu Val Ile Ser His Trp His Pro
230 235 240
Asn Ile Thr Ile Asn Ile Val Asp Asp His Thr Pro Trp Val Lys
245 250 255
Gly Ser Val Pro Pro Pro Leu Asp Gln Tyr Val Lys Phe Asp Ala
260 265 270
Val Ser Gly Asp Tyr Tyr Pro Ile Ile Tyr Phe Asn Asp Tyr Trp
275 280 285
Asn Leu Gln Lys Asp Tyr Tyr Pro Ile Asn Glu Ser Leu Ala Ser
290 295 300
Leu Pro Leu Arg Val Ser Phe Cys Pro Leu Ser Leu Trp Arg Trp
305 310 315
Gln Leu Tyr Ala Ala Gln Ser Thr Lys Ser Pro Trp Asn Phe Leu
320 325 330
Gly Asp Glu Leu Tyr Glu Gln Ser Asp Glu Glu Gln Asp Ser Val
335 340 345
Lys Val Ala Leu Leu Glu Thr Asn Pro Tyr Leu Leu Ala Leu Thr
350 355 360
Ile Ile Val Ser Ile Val His Ser Val Phe Glu Phe Leu Ala Phe
365 370 375
Lys Asn Asp Ile Gln Phe Trp Asn Ser Arg Gln Ser Leu Glu Gly
380 385 390
Leu Ser Val Arg Ser Val Phe Phe Gly Val Phe Gln Ser Phe Val
395 400 405
Val Leu Leu Tyr Ile Leu Asp Asn Glu Thr Asn Phe Val Val Gln
410 415 420
Val Ser Val Phe Ile Gly Val Leu Ile Asp Leu Trp Lys Ile Thr
425 430 435
Lys Val Met Asp Val Arg Leu Asp Arg Glu His Arg Val Ala Gly
440 445 450
Ile Phe Pro Arg Leu Ser Phe Lys Asp Lys Ser Thr Tyr Ile Glu
455 460 465
Ser Ser Thr Lys Val Tyr Asp Asp Met Ala Phe Arg Tyr Leu Ser
470 475 480
Trp Ile Leu Phe Pro Ser Trp Ala Ala Met Pro Ser Thr Val Phe
485 490 495
Cys Thr Trp Ser Thr Arg Ala Gly Thr Pro Gly Cys Ser Ala Cys
500 505 510
Ser Thr Ala Ser Cys
515

<210> 4
<211> 495
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1457779

<400> 4
Met Gly Leu Ser Arg Lys Glu Gln Val Phe Leu Ala Leu Leu Gly
1 5 10 15

PF-0489-1 CON

Ala	Ser	Gly	Val	Ser	Gly	Leu	Thr	Ala	Leu	Ile	Leu	Leu	Leu	Val
				20					25					30
Glu	Ala	Thr	Ser	Val	Leu	Leu	Pro	Thr	Asp	Ile	Lys	Phe	Gly	Ile
				35					40					45
Val	Phe	Asp	Ala	Gly	Ser	Ser	His	Thr	Ser	Leu	Phe	Leu	Tyr	Gln
				50					55					60
Trp	Pro	Ala	Asn	Lys	Glu	Asn	Gly	Thr	Gly	Val	Val	Ser	Gln	Ala
				65					70					75
Leu	Ala	Cys	Gln	Val	Glu	Gly	Pro	Gly	Ile	Ser	Ser	Tyr	Thr	Ser
				80					85					90
Asn	Ala	Ala	Gln	Ala	Gly	Glu	Ser	Leu	Gln	Gly	Cys	Leu	Glu	Glu
				95					100					105
Ala	Leu	Val	Leu	Ile	Pro	Glu	Ala	Gln	His	Arg	Lys	Thr	Pro	Thr
				110					115					120
Phe	Leu	Gly	Ala	Thr	Ala	Gly	Met	Arg	Leu	Leu	Ser	Arg	Lys	Asn
				125					130					135
Ser	Ser	Gln	Ala	Arg	Asp	Ile	Phe	Ala	Ala	Val	Thr	Gln	Val	Leu
				140					145					150
Gly	Arg	Ser	Pro	Val	Asp	Phe	Trp	Gly	Ala	Glu	Leu	Leu	Ala	Gly
				155					160					165
Gln	Ala	Glu	Gly	Ala	Phe	Gly	Trp	Ile	Thr	Val	Asn	Tyr	Gly	Leu
				170					175					180
Gly	Thr	Leu	Val	Lys	Tyr	Ser	Phe	Thr	Gly	Glu	Trp	Ile	Gln	Pro
				185					190					195
Pro	Glu	Glu	Met	Leu	Val	Gly	Ala	Leu	Asp	Met	Gly	Gly	Ala	Ser
				200					205					210
Thr	Gln	Ile	Thr	Phe	Val	Pro	Gly	Gly	Pro	Ile	Leu	Asp	Lys	Ser
				215					220					225
Thr	Gln	Ala	Asp	Phe	Arg	Leu	Tyr	Gly	Ser	Asp	Tyr	Ser	Val	Tyr
				230					235					240
Thr	His	Ser	Tyr	Leu	Cys	Phe	Gly	Arg	Asp	Gln	Met	Leu	Ser	Arg
				245					250					255
Leu	Leu	Val	Gly	Leu	Val	Gln	Ser	Arg	Pro	Ala	Ala	Leu	Leu	Arg
				260					265					270
His	Pro	Cys	Tyr	Leu	Ser	Gly	Tyr	Gln	Thr	Thr	Leu	Ala	Leu	Gly
				275					280					285
Pro	Leu	Tyr	Glu	Ser	Pro	Cys	Val	His	Ala	Thr	Pro	Pro	Leu	Ser
				290					295					300
Leu	Pro	Gln	Asn	Leu	Thr	Val	Glu	Gly	Thr	Gly	Asn	Pro	Gly	Ala
				305					310					315
Cys	Val	Ser	Ala	Ile	Arg	Glu	Leu	Phe	Asn	Phe	Ser	Ser	Cys	Gln
				320					325					330
Gly	Gln	Glu	Asp	Cys	Ala	Phe	Asp	Gly	Val	Tyr	Gln	Pro	Pro	Leu
				335					340					345
Arg	Gly	Gln	Phe	Tyr	Ala	Phe	Ser	Asn	Phe	Tyr	Tyr	Thr	Phe	His
				350					355					360
Phe	Leu	Asn	Leu	Thr	Ser	Arg	Gln	Pro	Leu	Ser	Thr	Val	Asn	Ala
				365					370					375
Thr	Ile	Trp	Glu	Phe	Cys	Gln	Arg	Pro	Trp	Lys	Leu	Val	Glu	Ala
				380					385					390
Ser	Tyr	Pro	Gly	Gln	Asp	Arg	Trp	Leu	Arg	Asp	Tyr	Cys	Ala	Ser
				395					400					405
Gly	Leu	Tyr	Ile	Leu	Thr	Leu	Leu	His	Glu	Gly	Tyr	Gly	Phe	Ser
				410					415					420
Glu	Glu	Thr	Trp	Pro	Ser	Leu	Glu	Phe	Arg	Lys	Gln	Ala	Gly	Gly
				425					430					435
Val	Asp	Ile	Gly	Trp	Thr	Leu	Gly	Tyr	Met	Leu	Asn	Leu	Thr	Gly
				440					445					450
Met	Ile	Pro	Ala	Asp	Ala	Pro	Ala	Gln	Trp	Arg	Ala	Glu	Ser	Tyr
				455					460					465
Gly	Val	Trp	Val	Ala	Lys	Val	Val	Phe	Met	Val	Leu	Ala	Leu	Val

PF-0489-1 CON

	470		475		480
Ala Val Val Gly	Ala Ala Leu Val Gln	Leu Phe Trp Leu Gln	Asp		
	485		490		495

<210> 5
<211> 156
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1481261

<400> 5
Met Leu Ser Ala Arg Asp Arg Arg Asp Arg His Pro Glu Glu Gly
1 5 10 15
Val Val Ala Glu Leu Gln Gly Phe Ala Val Asp Lys Ala Phe Leu
20 25 30
Thr Ser His Lys Gly Ile Leu Leu Glu Thr Glu Leu Ala Leu Thr
35 40 45
Leu Ile Ile Phe Ile Cys Phe Thr Ala Ser Ile Ser Ala Tyr Met
50 55 60
Ala Ala Ala Leu Leu Glu Phe Phe Ile Thr Leu Ala Phe Leu Phe
65 70 75
Leu Tyr Ala Thr Gln Tyr Tyr Gln Arg Phe Asp Arg Ile Asn Trp
80 85 90
Pro Cys Leu Asp Phe Leu Arg Cys Val Ser Ala Ile Ile Ile Phe
95 100 105
Leu Val Val Ser Phe Ala Ala Val Thr Ser Arg Asp Gly Ala Ala
110 115 120
Ile Ala Ala Phe Val Phe Gly Ile Ile Leu Val Ser Ile Phe Ala
125 130 135
Tyr Asp Ala Phe Lys Ile Tyr Arg Thr Glu Met Ala Pro Gly Ala
140 145 150
Ser Gln Gly Asp Gln
155

<210> 6
<211> 358
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1487802

<400> 6
Met Ser Ala Asp Ala Ala Ala Gly Ala Pro Leu Pro Arg Leu Cys
1 5 10 15
Cys Leu Glu Lys Gly Pro Asn Gly Tyr Gly Phe His Leu His Gly
20 25 30
Glu Lys Gly Lys Leu Gly Gln Tyr Ile Arg Leu Val Glu Pro Gly
35 40 45
Ser Pro Ala Glu Lys Ala Gly Leu Leu Ala Gly Asp Arg Leu Val
50 55 60
Glu Val Asn Gly Glu Asn Val Glu Lys Glu Thr His Gln Gln Val
65 70 75
Val Ser Arg Ile Arg Ala Ala Leu Asn Ala Val Arg Leu Leu Val
80 85 90
Val Asp Pro Glu Thr Asp Glu Gln Leu Gln Lys Leu Gly Val Gln

PF-0489-1 CON

	95		100		105									
Val	Arg	Glu	Glu	Leu	Leu	Arg	Ala	Gln	Glu	Ala	Pro	Gly	Gln	Ala
	110													
Glu	Pro	Pro	Ala	Ala	Ala	Glu	Val	Gln	Gly	Ala	Gly	Asn	Glu	Asn
	125													
Glu	Pro	Arg	Glu	Ala	Asp	Lys	Ser	His	Pro	Glu	Gln	Arg	Glu	Leu
	140													
Arg	Pro	Arg	Leu	Cys	Thr	Met	Lys	Lys	Gly	Pro	Ser	Gly	Tyr	Gly
	155													
Phe	Asn	Leu	His	Ser	Asp	Lys	Ser	Lys	Pro	Gly	Gln	Phe	Ile	Arg
	170													
Ser	Val	Asp	Pro	Asp	Ser	Pro	Ala	Glu	Ala	Ser	Gly	Leu	Arg	Ala
	185													
Gln	Asp	Arg	Ile	Val	Glu	Val	Asn	Gly	Val	Cys	Met	Glu	Gly	Lys
	200													
Gln	His	Gly	Asp	Val	Val	Ser	Ala	Ile	Arg	Ala	Gly	Gly	Asp	Glu
	215													
Thr	Lys	Leu	Leu	Val	Val	Asp	Arg	Glu	Thr	Asp	Glu	Phe	Phe	Lys
	230													
Lys	Cys	Arg	Val	Ile	Pro	Ser	Gln	Glu	His	Leu	Asn	Gly	Pro	Leu
	245													
Pro	Val	Pro	Phe	Thr	Asn	Gly	Glu	Ile	Gln	Lys	Glu	Asn	Ser	Arg
	260													
Glu	Ala	Leu	Ala	Glu	Ala	Ala	Leu	Glu	Ser	Pro	Arg	Pro	Ala	Leu
	275													
Val	Arg	Ser	Ala	Ser	Ser	Asp	Thr	Ser	Glu	Glu	Leu	Asn	Ser	Gln
	290													
Asp	Ser	Pro	Pro	Lys	Gln	Asp	Ser	Thr	Ala	Pro	Ser	Ser	Thr	Ser
	305													
Ser	Ser	Asp	Pro	Ile	Leu	Asp	Phe	Asn	Ile	Ser	Leu	Ala	Met	Ala
	320													
Lys	Glu	Arg	Ala	His	Gln	Lys	Arg	Ser	Ser	Lys	Arg	Ala	Pro	Gln
	335													
Met	Asp	Trp	Ser	Lys	Lys	Asn	Glu	Leu	Phe	Ser	Asn	Leu		
	350													

<210> 7
 <211> 280
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 1718830

<400>	7													
Met	Glu	Glu	Phe	Lys	Asn	Asp	Met	Leu	Thr	Glu	Lys	Asp	Ala	Arg
1				5					10					15
Tyr	Leu	Ala	Val	Lys	Glu	Val	Leu	Cys	His	Leu	Ile	Glu	Cys	Asn
				20					25					30
Lys	Asp	Val	Pro	Gly	Ile	Ser	Gln	Ile	Asn	Trp	Val	Ile	His	Val
				35					40					45
Val	Asp	Ser	Pro	Ile	Ile	Asn	Ala	Phe	Val	Leu	Pro	Asn	Gly	Gln
				50					55					60
Met	Phe	Val	Phe	Thr	Gly	Phe	Leu	Asn	Ser	Val	Thr	Asp	Ile	His
				65					70					75
Gln	Leu	Ser	Phe	Leu	Leu	Gly	His	Glu	Ile	Ala	His	Ala	Val	Leu
				80					85					90
Gly	His	Ala	Ala	Glu	Lys	Ala	Gly	Met	Val	His	Leu	Leu	Asp	Phe
				95					100					105
Leu	Gly	Met	Ile	Phe	Leu	Thr	Met	Ile	Trp	Ala	Ile	Cys	Pro	Arg

	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	2031-2032	2032-2033	2033-2034	2034-2035	2035-2036	2036-2037	2037-2038	2038-2039	2039-2040	2040-2041	2041-2042	2042-2043	2043-2044	2044-2045	2045-2046	2046-2047	2047-2048	2048-2049	2049-2050	2050-2051	2051-2052	2052-2053	2053-2054	2054-2055	2055-2056	2056-2057	2057-2058	2058-2059	2059-2060	2060-2061	2061-2062	2062-2063	2063-2064	2064-2065	2065-2066	2066-2067	2067-2068	2068-2069	2069-2070	2070-2071	2071-2072	2072-2073	2073-2074	2074-2075	2075-2076	2076-2077	2077-2078	2078-2079	2079-2080	2080-2081	2081-2082	2082-2083	2083-2084	2084-2085	2085-2086	2086-2087	2087-2088	2088-2089	2089-2090	2090-2091	2091-2092	2092-2093	2093-2094	2094-2095	2095-2096	2096-2097	2097-2098	2098-2099	2099-2100	2100-2101	2101-2102	2102-2103	2103-2104	2104-2105	2105-2106	2106-2107	2107-2108	2108-2109	2109-2110	2110-2111	2111-2112	2112-2113	2113-2114	2114-2115	2115-2116	2116-2117	2117-2118	2118-2119	2119-2120	2120-2121	2121-2122	2122-2123	2123-2124	2124-2125	2125-2126	2126-2127	2127-2128	2128-2129	2129-2130	2130-2131	2131-2132	2132-2133	2133-2134	2134-2135	2135-2136	2136-2137	2137-2138	2138-2139	2139-2140	2140-2141	2141-2142	2142-2143	2143-2144	2144-2145	2145-2146	2146-2147	2147-2148	2148-2149	2149-2150	2150-2151	2151-2152	2152-2153	2153-2154	2154-2155	2155-2156	2156-2157	2157-2158	2158-2159	2159-2160	2160-2161	2161-2162	2162-2163	2163-2164	2164-2165	2165-2166	2166-2167	2167-2168	2168-2169	2169-2170	2170-2171	2171-2172	2172-2173	2173-2174	2174-2175	2175-2176	2176-2177	2177-2178	2178-2179	2179-2180	2180-2181	2181-2182	2182-2183	2183-2184	2184-2185	2185-2186	2186-2187	2187-2188	2188-2189	2189-2190	2190-2191	2191-2192	2192-2193	2193-2194	2194-2195	2195-2196	2196-2197	2197-2198	2198-2199	2199-2200	2200-2201	2201-2202	2202-2203	2203-2204	2204-2205	2205-2206	2206-2207	2207-2208	2208-2209	2209-2210	2210-2211	2211-2212	2212-2213	2213-2214	2214-2215	2215-2216	2216-2217	2217-2218	2218-2219	2219-2220	2220-2221	2221-2222	2222-2223	2223-2224	2224-2225	2225-2226	2226-2227	2227-2228	2228-2229	2229-2230	2230-2231	2231-2232	2232-2233	2233-2234	2234-2235	2235-2236	2236-2237	2237-2238	2238-2239	2239-2240	2240-2241	2241-2242	2242-2243	2243-2244	2244-2245	2245-2246	2246-2247	2247-2248	2248-2249	2249-2250	2250-2251	2251-2252	2252-2253	2253-2254	2254-2255	2255-2256	2256-2257	2257-2258	2258-2259	2259-2260	2260-2261	2261-2262	2262-2263	2263-2264	2264-2265	2265-2266	2266-2267	2267-2268	2268
--	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	------

```
<210> 8
<211> 914
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1737775
```

Met	Gly	Pro	Phe	Lys	Ser	Ser	Val	Phe	Ile	Leu	Ile	Leu	His	Leu
1				5					10					15
Leu	Glu	Gly	Ala	Leu	Ser	Asn	Ser	Leu	Ile	Gln	Leu	Asn	Asn	Asn
				20					25					30
Gly	Tyr	Glu	Gly	Ile	Val	Val	Ala	Ile	Asp	Pro	Asn	Val	Pro	Glu
				35					40					45
Asp	Glu	Thr	Leu	Ile	Gln	Gln	Ile	Lys	Asp	Met	Val	Thr	Gln	Ala
				50					55					60
Ser	Leu	Tyr	Leu	Phe	Glu	Ala	Thr	Gly	Lys	Arg	Phe	Tyr	Phe	Lys
				65					70					75
Asn	Val	Ala	Ile	Leu	Ile	Pro	Glu	Thr	Trp	Lys	Thr	Lys	Ala	Asp
				80					85					90
Tyr	Val	Arg	Pro	Lys	Leu	Glu	Thr	Tyr	Lys	Asn	Ala	Asp	Val	Leu
				95					100					105
Val	Ala	Glu	Ser	Thr	Pro	Pro	Gly	Asn	Asp	Glu	Pro	Tyr	Thr	Glu
				110					115					120
Gln	Met	Gly	Asn	Cys	Gly	Glu	Lys	Gly	Glu	Arg	Ile	His	Leu	Thr
				125					130					135
Pro	Asp	Phe	Ile	Ala	Gly	Lys	Lys	Leu	Ala	Glu	Tyr	Gly	Pro	Gln
				140					145					150
Gly	Arg	Ala	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val
				155					160					165
Phe	Asp	Glu	Tyr	Asn	Asn	Asp	Glu	Lys	Phe	Tyr	Leu	Ser	Asn	Gly
				170					175					180
Arg	Ile	Gln	Ala	Val	Arg	Cys	Ser	Ala	Gly	Ile	Thr	Gly	Thr	Asn
				185					190					195
Val	Val	Lys	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Tyr	Thr	Lys	Arg	Cys

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

8

PF-0489-1 CON

Tyr	Phe	Thr	Thr	Tyr	Asp	Thr	Asn	Gly	Arg	Tyr	Ser	Val	Lys	Val	
				665					670					675	
Arg	Ala	Leu	Gly	Gly	Val	Asn	Ala	Ala	Arg	Arg	Arg	Val	Ile	Pro	
				680					685					690	
Gln	Gln	Ser	Gly	Ala	Leu	Tyr	Ile	Pro	Gly	Trp	Ile	Glu	Asn	Asp	
				695					700					705	
Glu	Ile	Gln	Trp	Asn	Pro	Pro	Arg	Pro	Glu	Ile	Asn	Lys	Asp	Asp	
				710					715					720	
Val	Gln	His	Lys	Gln	Val	Cys	Phe	Ser	Arg	Thr	Ser	Ser	Gly	Gly	
				725					730					735	
Ser	Phe	Val	Ala	Ser	Asp	Val	Pro	Asn	Ala	Pro	Ile	Pro	Asp	Leu	
				740					745					750	
Phe	Pro	Pro	Gly	Gln	Ile	Thr	Asp	Leu	Lys	Ala	Glu	Ile	His	Gly	
				755					760					765	
Gly	Ser	Leu	Ile	Asn	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asp	Tyr	
				770					775					780	
Asp	His	Gly	Thr	Ala	His	Lys	Tyr	Ile	Ile	Arg	Ile	Ser	Thr	Ser	
				785					790					795	
Ile	Leu	Asp	Leu	Arg	Asp	Lys	Phe	Asn	Glu	Ser	Leu	Gln	Val	Asn	
				800					805					810	
Thr	Thr	Ala	Leu	Ile	Pro	Lys	Glu	Ala	Asn	Ser	Glu	Glu	Val	Phe	
				815					820					825	
Leu	Phe	Lys	Pro	Glu	Asn	Ile	Thr	Phe	Glu	Asn	Gly	Thr	Asp	Leu	
				830					835					840	
Phe	Ile	Ala	Ile	Gln	Ala	Val	Asp	Lys	Val	Asp	Leu	Lys	Ser	Glu	
				845					850					855	
Ile	Ser	Asn	Ile	Ala	Arg	Val	Ser	Leu	Phe	Ile	Pro	Pro	Gln	Thr	
				860					865					870	
Pro	Pro	Glu	Thr	Pro	Ser	Pro	Asp	Glu	Thr	Ser	Ala	Pro	Cys	Pro	
				875					880					885	
Asn	Ile	His	Ile	Asn	Ser	Thr	Ile	Pro	Gly	Ile	His	Ile	Leu	Lys	
				890					895					900	
Ile	Met	Trp	Lys	Trp	Ile	Gly	Glu	Leu	Gln	Leu	Ser	Ile	Ala		
				905					910						

<210> 9
 <211> 950
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 1794154

<400>	9														
Met	Thr	Trp	Arg	Met	Gly	Pro	Arg	Phe	Thr	Met	Leu	Leu	Ala	Met	
1				5					10					15	
Trp	Leu	Val	Cys	Gly	Ser	Glu	Pro	His	Pro	His	Ala	Thr	Ile	Arg	
				20					25					30	
Gly	Ser	His	Gly	Gly	Arg	Lys	Val	Pro	Leu	Val	Ser	Pro	Asp	Ser	
				35					40					45	
Ser	Arg	Pro	Ala	Arg	Phe	Leu	Arg	His	Thr	Gly	Arg	Ser	Arg	Gly	
				50					55					60	
Ile	Glu	Arg	Ser	Thr	Leu	Glu	Glu	Pro	Asn	Leu	Gln	Pro	Leu	Gln	
				65					70					75	
Arg	Arg	Arg	Ser	Val	Pro	Val	Leu	Arg	Leu	Ala	Arg	Pro	Thr	Glu	
				80					85					90	
Pro	Pro	Ala	Arg	Ser	Asp	Ile	Asn	Gly	Ala	Ala	Val	Arg	Pro	Glu	
				95					100					105	
Gln	Arg	Pro	Ala	Ala	Arg	Gly	Ser	Pro	Arg	Glu	Met	Ile	Arg	Asp	
				110					115					120	

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

10

PF-0489-1 CON

Lys Lys Gly Gly	575	580	585
Lys Thr Glu Gln Asp	590	Gly Tyr Gln Lys Pro Thr	600
Asn Lys His Phe Thr	605	Lys Ser Val Ala Asp Leu	615
Leu Gly Ser Phe Glu	620	Leu Leu Ile Thr Ala	630
Pro Lys Ala Glu Asn	635	Gln Arg Asp Glu Tyr	645
Leu Glu Ser Phe Cys	650	Lys Ile Ser Val Ile	660
Thr Ile Phe Gly Pro	665	Met Lys Ile Asp His	675
Phe Gln Leu Asp Asn	680	Arg Val Val Asp Asp Glu	690
Asp Leu Val Asp Gln	695	Leu Arg Lys Glu Tyr	705
Gly Met Thr Tyr Asn	710	Val Leu Thr Asp Val Asp	720
Leu Arg Val Lys Gln	725	Pro Ile Thr Met Lys Ser	735
Val Phe Asp Leu Ile	740	Ser Arg Ile Lys Asp Met	750
Glu Lys Gln Lys Lys	755	Cys Lys Glu Asp Lys Lys	765
Gln Ser Leu Glu Asn	770	Phe Arg Trp Arg Arg Arg	780
Leu Leu Val Ile Ser	785	Glu Asp Trp Ala Tyr Ser	795
Gln Gln Leu Ser Ala	800	Leu Cys Asn Phe Gly Leu	810
Arg His Ile Thr Ile	815	Leu Lys Leu Leu Gly Val Gly Glu Glu Val	825
Gly Gly Val Leu Glu	830	Leu Phe Pro Ile Asn Gly Ser Ser Val Val	840
Glu Arg Glu Asp Val	845	Pro Ala His Leu Val Lys Asp Ile Arg Asn	855
Tyr Phe Gln Val Ser	860	Pro Glu Tyr Phe Ser Met Leu Leu Val Gly	870
Lys Asp Gly Asn Val	875	Lys Ser Trp Tyr Pro Ser Pro Met Trp Ser	885
Met Val Ile Val Tyr	890	Asp Leu Ile Asp Ser Met Gln Leu Arg Arg	900
Gln Glu Met Ala Ile	905	Gln Gln Ser Leu Gly Met Arg Cys Pro Glu	915
Asp Glu Tyr Ala Gly	920	Tyr Gly Tyr His Ser Tyr His Gln Gly Tyr	930
Gln Asp Gly Tyr Gln	935	Asp Asp Tyr Arg His His Glu Ser Tyr His	945
His Gly Tyr Pro Tyr	950		

<210> 10
 <211> 578
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2027624

[illegible]

Met	Ala	Ala	Ala	Met	Pro	Leu	Ala	Leu	Leu	Val	Leu	Leu	Leu	Leu
1				5					10					15
Gly	Pro	Gly	Gly	Trp	Cys	Leu	Ala	Glu	Pro	Pro	Arg	Asp	Ser	Leu
				20					25					30
Arg	Glu	Glu	Leu	Val	Ile	Thr	Pro	Leu	Pro	Ser	Gly	Asp	Val	Ala
				35					40					45
Ala	Thr	Phe	Gln	Phe	Arg	Thr	Arg	Trp	Asp	Ser	Glu	Leu	Gln	Arg
				50					55					60
Glu	Gly	Val	Ser	His	Tyr	Arg	Leu	Phe	Pro	Lys	Ala	Leu	Gly	Gln
				65					70					75
Leu	Ile	Ser	Lys	Tyr	Ser	Leu	Arg	Glu	Leu	His	Leu	Ser	Phe	Thr
				80					85					90
Gln	Gly	Phe	Trp	Arg	Thr	Arg	Tyr	Trp	Gly	Pro	Pro	Phe	Leu	Gln
				95					100					105
Ala	Pro	Ser	Gly	Ala	Glu	Leu	Trp	Val	Trp	Phe	Gln	Asp	Thr	Val
				110					115					120
Thr	Asp	Val	Asp	Lys	Ser	Trp	Lys	Glu	Leu	Ser	Asn	Val	Leu	Ser
				125					130					135
Gly	Ile	Phe	Cys	Ala	Ser	Leu	Asn	Phe	Ile	Asp	Ser	Thr	Asn	Thr
				140					145					150
Val	Thr	Pro	Thr	Ala	Ser	Phe	Lys	Pro	Leu	Gly	Leu	Ala	Asn	Asp
				155					160					165
Thr	Asp	His	Tyr	Phe	Leu	Arg	Tyr	Ala	Val	Leu	Pro	Arg	Glu	Val
				170					175					180
Val	Cys	Thr	Glu	Asn	Leu	Thr	Pro	Trp	Lys	Lys	Leu	Leu	Pro	Cys
				185					190					195
Ser	Ser	Lys	Ala	Gly	Leu	Ser	Val	Leu	Leu	Lys	Ala	Asp	Arg	Leu
				200					205					210
Phe	His	Thr	Ser	Tyr	His	Ser	Gln	Ala	Val	His	Ile	Arg	Pro	Val
				215					220					225
Cys	Arg	Asn	Ala	Arg	Cys	Thr	Ser	Ile	Ser	Trp	Glu	Leu	Arg	Gln
				230					235					240
Thr	Leu	Ser	Val	Val	Phe	Asp	Ala	Phe	Ile	Thr	Gly	Gln	Gly	Lys
				245					250					255
Lys	Asp	Trp	Ser	Leu	Phe	Arg	Met	Phe	Ser	Arg	Thr	Leu	Thr	Glu
				260					265					270
Pro	Cys	Pro	Leu	Ala	Ser	Glu	Ser	Arg	Val	Tyr	Val	Asp	Ile	Thr
				275					280					285
Thr	Tyr	Asn	Gln	Asp	Asn	Glu	Thr	Leu	Glu	Val	His	Pro	Pro	Pro
				290					295					300
Thr	Thr	Thr	Tyr	Gln	Asp	Val	Ile	Leu	Gly	Thr	Arg	Lys	Thr	Tyr
				305					310					315
Ala	Ile	Tyr	Asp	Leu	Leu	Asp	Thr	Ala	Met	Ile	Asn	Asn	Ser	Arg
				320					325					330
Asn	Leu	Asn	Ile	Gln	Leu	Lys	Trp	Lys	Arg	Pro	Pro	Glu	Asn	Glu
				335					340					345
Ala	Pro	Pro	Val	Pro	Phe	Leu	His	Ala	Gln	Arg	Tyr	Val	Ser	Gly

PF-0489-1 CON

Leu	Lys	Trp	Thr	Glu	Tyr	Thr	Pro	Asp	Pro	Asn	His	Gly	Phe	Tyr
				455					460					465
Val	Ser	Pro	Ser	Val	Leu	Ser	Ala	Leu	Val	Pro	Ser	Met	Val	Ala
				470					475					480
Ala	Lys	Pro	Val	Asp	Trp	Glu	Glu	Ser	Pro	Leu	Phe	Asn	Ser	Leu
				485					490					495
Phe	Pro	Val	Ser	Asp	Gly	Ser	Asn	Tyr	Phe	Val	Arg	Leu	Tyr	Thr
				500					505					510
Glu	Pro	Leu	Leu	Val	Asn	Leu	Pro	Thr	Pro	Asp	Phe	Ser	Met	Pro
				515					520					525
Tyr	Asn	Val	Ile	Cys	Leu	Thr	Cys	Thr	Val	Val	Ala	Val	Cys	Tyr
				530					535					540
Gly	Ser	Phe	Tyr	Asn	Leu	Leu	Thr	Arg	Thr	Phe	His	Ile	Glu	Glu
				545					550					555
Pro	Arg	Thr	Gly	Gly	Leu	Ala	Lys	Arg	Leu	Ala	Asn	Leu	Ile	Arg
				560					565					570
Arg	Ala	Arg	Gly	Val	Pro	Pro	Leu							
				575										

<210> 11
<211> 270
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2057213

<220>
<221> unsure
<222> 9, 16
<223> unknown or other

<400> 11

Met	Asp	Trp	Lys	Thr	Leu	Gln	Ala	Xaa	Met	Ser	Pro	Pro	Asn	Lys
1				5					10					15
Xaa	Ser	Thr	Ala	Phe	Gly	Arg	Ile	Trp	Leu	Ser	Val	Val	Phe	Val
				20					25					30
Phe	Arg	Val	Leu	Val	Tyr	Val	Val	Ala	Ala	Glu	Arg	Val	Trp	Gly
				35					40					45
Asp	Glu	Gln	Lys	Asp	Phe	Asp	Cys	Asn	Thr	Lys	Gln	Pro	Gly	Cys
				50					55					60
Thr	Asn	Val	Cys	Tyr	Asp	Asn	Tyr	Phe	Pro	Ile	Ser	Asn	Ile	Arg
				65					70					75
Leu	Trp	Ala	Leu	Gln	Leu	Ile	Phe	Val	Thr	Cys	Pro	Ser	Leu	Leu
				80					85					90
Val	Ile	Leu	His	Val	Ala	Tyr	Arg	Glu	Glu	Arg	Glu	Arg	Arg	His
				95					100					105
Arg	Gln	Lys	His	Gly	Asp	Gln	Cys	Ala	Lys	Leu	Tyr	Asp	Asn	Ala
				110					115					120
Gly	Lys	Lys	His	Gly	Gly	Leu	Trp	Trp	Thr	Tyr	Leu	Phe	Ser	Leu
				125					130					135
Ile	Phe	Lys	Leu	Ile	Ile	Glu	Phe	Leu	Phe	Leu	Tyr	Leu	Leu	His
				140					145					150
Thr	Leu	Trp	His	Gly	Phe	Asn	Met	Pro	Arg	Leu	Val	Gln	Cys	Ala
				155					160					165
Asn	Met	Ala	Pro	Cys	Pro	Asn	Leu	Val	Asp	Cys	Tyr	Ile	Ala	Arg
				170					175					180
Pro	Thr	Glu	Lys	Lys	Ile	Phe	Thr	Tyr	Phe	Met	Val	Gly	Ala	Ser
				185					190					195
Ala	Val	Cys	Ile	Val	Leu	Thr	Ile	Cys	Glu	Leu	Cys	Tyr	Leu	Ile

PF-0489-1 CON

	200		205		210
Cys His Arg Val	Leu Arg Gly Leu His	Lys Asp Lys Pro Arg	Gly		
	215		220		225
Gly Cys Ser Pro	Ser Ser Ser Ala Ser	Arg Ala Ser Thr Cys	Arg		
	230		235		240
Cys His His Lys	Leu Val Glu Ala Gly	Glu Val Asp Pro Asp	Pro		
	245		250		255
Gly Asn Asn Lys	Leu Gln Ala Ser Ala	Pro Asn Leu Thr Pro	Ile		
	260		265		270

<210> 12
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2073804

<400> 12

Met	Ala	Glu	Asn	Ser	Gly	Arg	Ala	Gly	Lys	Ser	Ser	Gly	Ser	Gly
1				5					10					15
Ala	Gly	Lys	Gly	Ala	Val	Ser	Ala	Glu	Gln	Val	Ile	Ala	Gly	Phe
				20					25					30
Asn	Arg	Leu	Arg	Gln	Glu	Gln	Arg	Gly	Leu	Ala	Ser	Lys	Ala	Ala
				35					40					45
Glu	Leu	Glu	Met	Glu	Leu	Asn	Glu	His	Ser	Leu	Val	Ile	Asp	Thr
				50					55					60
Leu	Lys	Glu	Val	Asp	Glu	Thr	Arg	Lys	Cys	Tyr	Arg	Met	Val	Gly
				65					70					75
Gly	Val	Leu	Val	Glu	Arg	Thr	Val	Lys	Glu	Val	Leu	Pro	Ala	Leu
				80					85					90
Glu	Asn	Asn	Lys	Glu	Gln	Ile	Gln	Lys	Ile	Ile	Glu	Thr	Leu	Thr
				95					100					105
Gln	Gln	Leu	Gln	Ala	Lys	Gly	Lys	Glu	Leu	Asn	Glu	Phe	Arg	Glu
				110					115					120
Lys	His	Asn	Ile	Arg	Leu	Met	Gly	Glu	Asp	Glu	Lys	Pro	Ala	Ala
				125					130					135
Lys	Glu	Asn	Ser	Glu	Gly	Ala	Gly	Ala	Lys	Ala	Ser	Ser	Ala	Gly
				140					145					150
Val	Leu	Val	Ser											

<210> 13
<211> 263
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No.: 2175401

<400> 13

Met	Val	Lys	Ile	Ala	Phe	Asn	Thr	Pro	Thr	Ala	Val	Gln	Lys	Glu
1				5					10					15
Glu	Ala	Arg	Gln	Asp	Val	Glu	Ala	Leu	Leu	Ser	Arg	Thr	Val	Arg
				20					25					30
Thr	Gln	Ile	Leu	Thr	Gly	Lys	Glu	Leu	Arg	Val	Ala	Thr	Gln	Glu
				35					40					45
Lys	Glu	Gly	Ser	Ser	Gly	Arg	Cys	Met	Leu	Thr	Leu	Leu	Gly	Leu

[illegible]

```
<210> 14
<211> 239
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2741580
```

<400> 14															
Met	Ala	Arg	Gly	Arg	Leu	Cys	Cys	Leu	Lys	Tyr	Met	Met	Phe	Leu	
1				5					10					15	
Phe	Asn	Leu	Ile	Phe	Trp	Leu	Cys	Gly	Cys	Gly	Leu	Leu	Gly	Val	
				20					25					30	
Gly	Ile	Trp	Leu	Ser	Val	Ser	Gln	Gly	Asn	Phe	Ala	Thr	Phe	Ser	
				35					40					45	
Pro	Ser	Phe	Pro	Ser	Leu	Phe	Ala	Ala	Asn	Leu	Val	Ile	Ala	Ile	
				50					55					60	
Gly	Thr	Ile	Val	Met	Val	Thr	Gly	Phe	Leu	Gly	Cys	Leu	Gly	Ala	
				65					70					75	
Ile	Lys	Glu	Asn	Lys	Cys	Leu	Leu	Leu	Ser	Phe	Phe	Ile	Val	Leu	
				80					85					90	
Leu	Val	Ile	Leu	Leu	Ala	Glu	Leu	Ile	Leu	Leu	Ile	Leu	Phe	Phe	
				95					100					105	
Val	Tyr	Met	Asp	Lys	Val	Asn	Glu	Asn	Ala	Lys	Lys	Asp	Leu	Lys	
				110					115					120	
Glu	Gly	Leu	Leu	Leu	Tyr	His	Thr	Glu	Asn	Asn	Val	Gly	Leu	Lys	
				125					130					135	
Asn	Ala	Trp	Asn	Ile	Ile	Gln	Ala	Glu	Met	Arg	Cys	Cys	Gly	Val	
				140					145					150	
Thr	Asp	Tyr	Thr	Asp	Trp	Tyr	Pro	Val	Leu	Gly	Glu	Asn	Thr	Val	

[illegible]

```
<210> 15
<211> 245
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2779610
```

```
<210> 16
<211> 275
<212> PRT
<213> Homo sapiens
```

PF-0489-1 CON

<220>

<221> misc_feature

<223> Incyte ID No: 2879792

<400> 16

Met Gly Asn Phe Arg Gly His Ala Leu Pro Gly Thr Phe Phe Phe
1 5 10 15
Ile Ile Gly Leu Trp Trp Cys Thr Lys Ser Ile Leu Lys Tyr Ile
20 25 30
Cys Lys Lys Gln Lys Arg Thr Cys Tyr Leu Gly Ser Lys Thr Leu
35 40 45
Phe Tyr Arg Leu Glu Ile Leu Glu Gly Ile Thr Ile Val Gly Met
50 55 60
Ala Leu Thr Gly Met Ala Gly Glu Gln Phe Ile Pro Gly Gly Pro
65 70 75
His Leu Met Leu Tyr Asp Tyr Lys Gln Gly His Trp Asn Gln Leu
80 85 90
Leu Gly Trp His His Phe Thr Met Tyr Phe Phe Phe Gly Leu Leu
95 100 105
Gly Val Ala Asp Ile Leu Cys Phe Thr Ile Ser Ser Leu Pro Val
110 115 120
Ser Leu Thr Lys Leu Met Leu Ser Asn Ala Leu Phe Val Glu Ala
125 130 135
Phe Ile Phe Tyr Asn His Thr His Gly Arg Glu Met Leu Asp Ile
140 145 150
Phe Val His Gln Leu Leu Val Leu Val Val Phe Leu Thr Gly Leu
155 160 165
Val Ala Phe Leu Glu Phe Leu Val Arg Asn Asn Val Leu Leu Glu
170 175 180
Leu Leu Arg Ser Ser Leu Ile Leu Leu Gln Gly Ser Trp Phe Phe
185 190 195
Gln Ile Gly Phe Val Leu Tyr Pro Pro Ser Gly Gly Pro Ala Trp
200 205 210
Asp Leu Met Asp His Glu Asn Ile Leu Phe Leu Thr Ile Cys Phe
215 220 225
Cys Trp His Tyr Ala Val Thr Ile Val Ile Val Gly Met Asn Tyr
230 235 240
Ala Phe Ile Thr Trp Leu Val Lys Ser Arg Leu Lys Arg Leu Cys
245 250 255
Ser Ser Glu Val Gly Leu Leu Lys Asn Ala Glu Arg Glu Gln Glu
260 265 270
Ser Glu Glu Glu Met
275

<210> 17

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3231062

<400> 17

Met Gly Arg Phe Arg Gly Gly Leu Arg Cys Ile Lys Tyr Leu Leu
1 5 10 15
Leu Gly Phe Asn Leu Leu Phe Trp Leu Ala Gly Ser Ala Val Ile
20 25 30
Ala Phe Gly Leu Trp Phe Arg Phe Gly Gly Ala Ile Lys Glu Leu
35 40 45
Ser Ser Glu Asp Lys Ser Pro Glu Tyr Phe Tyr Val Gly Leu Tyr

Val	Leu	Val	Gly	Ala	Gly	Ala	Leu	Met	Met	Ala	Val	Gly	Phe	Phe	50	55	60
				65					70						75		
Gly	Cys	Cys	Gly	Ala	Met	Arg	Glu	Ser	Gln	Cys	Val	Leu	Gly	Ser	80	85	90
				95					100						105		
Phe	Phe	Thr	Cys	Leu	Leu	Val	Ile	Phe	Ala	Ala	Glu	Val	Thr	Thr	110	115	120
				125					130						135		
Gly	Val	Phe	Ala	Phe	Ile	Gly	Lys	Gly	Val	Ala	Ile	Arg	His	Val	140	145	150
				155					160						165		
Gln	Thr	Met	Tyr	Glu	Glu	Ala	Tyr	Asn	Asp	Tyr	Leu	Lys	Asp	Arg	170	175	180
				185					190						195		
Gly	Lys	Gly	Asn	Gly	Thr	Leu	Ile	Thr	Phe	His	Ser	Thr	Phe	Gln	200	205	210
				215					220								
Cys	Cys	Gly	Lys	Glu	Ser	Ser	Glu	Gln	Val	Gln	Pro	Thr	Cys	Pro			
				225					230								
Lys	Glu	Leu	Leu	Gly	His	Lys	Asn	Cys	Ile	Asp	Glu	Ile	Glu	Thr			
				235					240								
Ile	Ile	Ser	Val	Lys	Leu	Gln	Leu	Ile	Gly	Ile	Val	Gly	Ile	Gly			
				245					250								
Ile	Ala	Gly	Leu	Thr	Ile	Phe	Gly	Met	Ile	Phe	Ser	Met	Val	Leu			
				255					260								
Cys	Cys	Ala	Ile	Arg	Asn	Ser	Arg	Asp	Val	Ile							
				265					270								

<210> 18
 <211> 1823
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 77138

<400> 18
 ctacgcgcgc cggacggaga ccaccttgcg gccgaccccg ctcccccgcc tcctcgggag 60
 agataaatgc tgactccgct cggaaagtgc tcaactgcaa agtttgctgt ccggtgcct 120
 agggctctggg aagctcgggc accctccctc tccggggctc ctgctcccac cctccggcc 180
 cccccaccgt cgcgctcctc caggctgggc ctgtggccgc ggtgcttttt aattttcccc 240
 cagctcagaa tcttgctgct cggccccag gagagcaaca actcaacggg aacgatgtgg 300
 aagggtgcag ctctgctctt cgttttggga agcgcgtcgc tctgggtcct ggcagaagga 360
 gccagcacag gccagccaga agatgacact gagactacag gtttggaagg cggcgttgcc 420
 atgccagggt cgaagatga tgtggtgact ccaggaacca gcgaagaccg ctataagtct 480
 ggcttgacaa ctctggtggc aacaagtgtc aacagtgtaa caggcattcg catcgaggat 540
 ctgccaaact cagaaagcac agtccacgcg caagaacaaa gtccaagcgc cacagctca 600
 aacgtggcca ccagtcactc cacggagaaa gtggatggag acacacagac aacagttgag 660
 aaagatgggt tgtcaacagt gacctgggt ggaatcatag ttgggggtct actagccatc 720
 ggcttcattg gtggaatcat cgttgtggtt atgcgaaaaa tgcgggaag gtactcgccc 780
 taaagagctg aagggttacg cctgctgcc aacgtgctta aaaaaagacc gtttctgact 840
 ctgtgccctg tccctgagct cgtgggagaa gatgacccgt ggaacacttg cctggcccac 900
 tcagaatcca cggtgacctc tccgcttgcc aaaataaccg aaggaaagac cgttcaccag 960
 acttggtccc tctaaacatt tgctgttcaa acatgttttt gaataacat tctataaaag 1020
 attatttgaa agacaaaatt catagaaaat ggagcaaaac tgtataaact gatttgtaac 1080
 taacactgga ccattggatc gatattatat gctgtaacca tgtgtctccg tctgaccatt 1140
 cttgttattg ttaaaatgca gaggaatctg gaaatattta tatccacgga gtccttgat 1200
 ccagtgtcac gtcagtaaat agcaccagca ttttgcaatt gctgatctgc tgaaatgtac 1260
 acattctggt ctagtgtggt ctatctttta aagcctgatc tgggtgtgaat aatcaactag 1320
 gaaatctaaa cttggataac acgtggtgaa caactgcctt tagctgggtc agattaatca 1380
 tttcaaagac atccatttta gatcacaagc aggaagtcca tagtctcaaa ggcactttgt 1440
 ttctcccaag taggccacca ggcagcctct agagtgtctt taccctaatc cttctccagc 1500
 catgacttgg tgactctaag cttgctccca cctgcccctt ccacttccct cagatgatga 1560
 ggagccaggg ctaagggggc agccttctct cttccagtg atgcacatcc ttcacattgg 1620

PF-0489-1 CON

ctgctttgtt	ctggaatatg	gatatctcag	cctggatgcc	gaggaagctg	ctggatgctt	1680
aatggtgcta	gaggctcaag	tgtgtttgaa	accaagagcc	agttgtcccc	catgcagaaa	1740
gaaatcctgt	gtgagcctct	ggtatgagac	ataaaatctg	ccagttttat	aacactcaaa	1800
aaaaaaaaac	acacaaaaaa	aaa				1823

<210> 19
<211> 1416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1381884

<400> 19	
attgtgtttt	ccacagaaga
ttcacagaga	ctcatatttg
cgtgtctcca	taaaggccac
aggetgattg	atthttagcca
atcctctgta	agaaagaacc
gaaaagcagg	aagctggaaa
gaagagggtac	tttccataaa
tcaatccttc	agccggtgat
ttgcagatcc	acatctctcg
agcacactgt	cagtaaaggg
tctgcatggt	tgcagtgcact
atgaagagtg	ggagcttgca
aatgaaacaa	agtgtttgtg
taggttttgc	agtaaagctg
ggtgggtgga	atthtcctttg
tttctttttc	acaggcacag
tgaaaaattg	gggttgattt
aagtattttg	taaagtctaa
ggatggacat	tttatcgtct
aaataaatat	cagttaaata
ttgcttttaa	atthtagtct
tcatgcagtt	tttctagagc
ttaatgaaac	atggatagtt
ttacttgtct	gcagaaaaaa
	aaaaaaaaag
	ggctgt
	1416

<210> 20
<211> 2487
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1427590

<400> 20	
ggaccgggag	cgggaagatg
tggcggccgg	gggaggcagc
cgccagcgga	gaccagcct
tcatcaaagg	tgtgctgttt
gagggccggc	ccctcaggac
acctgttccc	caaagacact
ttacagactt	caacgccacg
actggactag	cggcgagaac
cacagagcgt	ccagcagaac
tccacccaga	cccccggcag
ggatgatcaa	caaatacaag
	cgcagacgat
	aggaggcgga
	cgggggccgc
	agcgcctggg
	120
	tgaccagcaa
	tggcagcatc
	gggagggacc
	180
	cgccccagcc
	ggcacccaat
	gcctggcagg
	240
	catcagcagt
	tggttccgcc
	300
	cccacgcgtc
	gccagccgca
	360
	cacgagcact
	gtgtatggcg
	420
	gcacgatctt
	cttgatgagc
	ctcgatatcc
	480
	acatccacgt
	ttacttcacc
	aagagtggct
	540
	tgccacagtc
	catatgtccc
	600
	caagaacctg
	ctgacaggag
	660

```

agacagaagc ggacccagaa atgatcaaga gggctgagga ctatgggcct gtggaggtga 720
tctcccattg gcaccccaac atcaccatca acatcgtgga cgaccacacg cctgtgggtga 780
agggcagtggt gccccctccc ctggatcaat atgtgaagtt cgacgccgtg agcggtgact 840
actatcccat catctacttc aatgactact ggaacctgca gaaggactac taccatca 900
acgagagcct ggccagcctg ccgctcccgcg tctccttctg cccgctctcg ctttggcgct 960
ggcagctcta tgctgccag agcaccaagt cgccctggaa ctctctgggt gatgagttgt 1020
acgagcagtc agatgaggag caggactcgg tgaagggtggc cctgctggag accaaccct 1080
acctgctggc gctcaccatc atcgtgtcta tcgttcacag tgtcttcgag ttcctggcct 1140
tcaagaatga tatccagttc tggaacagcc ggcagtcct ggagggcctg tccgtgcgct 1200
ccgtcttctt cggcgttttc cagtcattcg ttggtcctct ctacatcctg gacaacgaga 1260
ccaacttcgt ggtccaggtc agcgtcttca ttggggctct catcgacctc tggaagatca 1320
ccaaggtcac ggacgtccgg ctggaccgag agcacagggt ggcaggaatc ttccccgcc 1380
tactcttcaa ggacaagtcc acgtatatcg agtcctcgac caaagtgtat gatgatattg 1440
cattccggta cctgtcctgg atcctcttcc cgctcctgggc tgctatgccg tctacagtct 1500
tctgtacctg gagcacaagg gctggtactc ctgggtgctc agcatgctct acggcttct 1560
gctgaccttc ggcttcatca ccatgacgcc ccagctcttc atcaactaca agctcaagtc 1620
tgtggccac cttccctggc gcatgctcac ctacaaggcc ctcaacacat tcatcgacga 1680
cctgttcgcc tttgtcatca agatgcccgt tatgtaccgg atcggtgcc tgcgggacga 1740
tgtggttttc ttcattacc tctaccaacg gtggatctac cgcgtcgacc ccaccaggt 1800
caacgagttt ggcattgagtg gagaagacc cacagctgcc gccccctgg ccgaggttcc 1860
cacagcagca ggggcctca cgccacacc tgcacccacc acgaccaccg ccaccaggga 1920
ggaggcctcc acgtccctgc ccaccaagcc caccaggggg gccagctctg ccagcgagcc 1980
ccaggaagcc cctccaaagc cagcagagga caagaaaaag gattagtcga gactggtcct 2040
cacctgctcc ggctcctggc gaccactacc cctgcgtccc ggcctcctcg cctccctcc 2100
ctgtgcctct ttccttgga agatcaggcc ggggcgggtg gaggcccgcc tcaggtcagg 2160
gccacgcgtg tgacgtaggg gccggggcag gccagggttt gtttgtggag gcgctgtctg 2220
tccctctgtc cctctgtgtt tccagccatc tcgcccctgc agcccagcac cactgggaat 2280
catggtgaag ctgatgcagc gttgccgagg ggggtgggtg ggcgggggtg gggccgggcc 2340
ccctacggg atgccacgg ccgttcatca tcttgtccct cgtcccccta ccactccc 2400
cctcctagac cgccgccctt taacacagtc tggatttaat aaattcatat ggggtgttaa 2460
cttaaactca aaaaaaaaaa aaaaaaa 2487

```

```

<210> 21
<211> 2261
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<223> Incyte ID No: 1457779

```

```

<400> 21
cctggagcca ggtgcacagc gcatgcccc aggctgtcac cgccctgcc cgcccacccc 60
agctgtcctg gacccagggg cagggagagg ctggacgcca ggtgcgagg cacagaagcg 120
tctaagcaca gcttctctct tgccgctccg ggaagtgggc agccagccca ggagccagta 180
ccacctgcac catggggctg tcccgggaag agcaggctct cttggccctg ctgggggcct 240
cgggggtctc aggcctcacg gcatcattc tctcctggt ggaggccacc agcgtgctcc 300
tgccacaga catcaagttt gggatcgtgt ttgatgcggg ctctccac acgtccctct 360
tctgtatca gtggcggcg aacaaggaga atggcacggg tgtggtcagc caggccctgg 420
cctgccaggt ggaaggcct ggaatctct cctacacttc taatgctgca caggctggtg 480
agagcctgca gggctgcttg gaggaggcgc ttggtgctgat ccagaggcc cagcatcgga 540
aaacacccac gttcctgggg gccacggctg gcatgagggt gctcagccgg aagaacagct 600
ctcaggccag ggacatcttt gcagcagtc cccaggctct gggccggct cccgtggact 660
tttggggctg cgagctcctg gccgggcagg ccgaagggtc ctttgggttg atcactgtca 720
actacggctt ggggacgctg gtcaagtact ccttactgg agaattggatc cagcctccgg 780
aggagatgct ggtgggtgct ctggacatgg gaggggcctc caccagatc acgttcgtgc 840
ctggggggccc catcttggac aagagcacc aggccgattt tcgctctac ggctccgact 900
acagcgtcta cactcacagc tacctgtgct ttggacggga ccagatgctg agcaggctcc 960
tcgtggggct ggtgcagagc cgccggctg cctgctccg tcaccctggt tacctcagcg 1020
gctaccagac cacactggcc ctgggcccgc tgtatgagtc accctgtgtc cagccacgc 1080
ccccgctgag cctccccag aacctcacag ttgaaggagc aggaaccct ggagcctgag 1140

```


PF-0489-1 CON

```
tctcagccat cccgggaactt ttcaacttct ccagctgcc a gggccaggag gactgcgcct 1200
ttgacgggggt ctaccagccc ccgctgccc ggcagttcta tgccttctcc aacttctact 1260
acaccttcca ctctctgaac ctcacctcca ggcagccctt gagcacggtc aacgccacca 1320
tctgggagtt ttgccagagg ccttggaac tgggtggaggc cagctaccct gggcaggacc 1380
gctggctgcg ggactactgt gcctcaggcc tgtacatcct caccctcctg cagcagggct 1440
acgggttcag cgaggagacc tggcccagcc tcgagttccg aaagcaggcg ggcgggtgtg 1500
acattggctg gacactgggc tacatgctga acctgaccgg gatgatcccg gccgatgcgc 1560
cggctcagtg gccgggcagag agctacggcg tctgggtggc caaagtgggtg ttcattgggtg 1620
tggccctggg ggcgggtggg ggggctgcct tgggtccagct cttctgggtg caggactagt 1680
gggaaggcgg aggtgggccc ccacagagcc cacaggcagc tgcgtcccgg atgctggagg 1740
cttctgagc cctgagcgcc gtggggcctt gctctgtggg tctgcccacg gtcagggtgac 1800
agccacctcc agggcacctg cagggtgggtg ctggccacag aggctgcatg acctcccctc 1860
ccggcgctcc tcccccaacc tccttccgca actgggcttc cagggccgta ggtgcctttc 1920
tgcacacagg ccgccaggac tcgtgggtgc tccaggctgt gtgactgcag ggccacatgc 1980
tgcttgcaaa cagggcaaga ccacggaggc acaggggtcc tgcctcctgat ggggcctcag 2040
gaggggaggga gaggggtgga agggaggagg ctgccccacc tggacccccg ctctccctgc 2100
tgttgtctga gcagatggat ggagtccagg cctgggggct tctgctgggc cagcccgcc 2160
tcccacaccc acttgagggg tgagactgca gtgggggttg tttttattaa aagcatcatg 2220
gacacagcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa g 2261
```

<210> 22
<211> 1034
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1481261

```
<400> 22
aaggggaggg attagagcct ccttctcttc tgcacctccc catgggtctc tagggggctg 60
gtgcaggcag cagcagaggc actctgggca gctgggtgag ggccatctg ggcaaggccc 120
ccagcgccctg ccttctcttc cggggccctg tgggcaaggc tcctgcttca ctttcagggt 180
tctcgaagtg ccttcttctg cctgtctgtt tccccatcct gccagatttc tgtttctctt 240
gctgggcttt tggcagtagg gggctgtgtt ggtgggccct acgaagatgc tcagtgcctg 300
agatcgccgg gaccggcacc ctgaggaggg ggtagttgca gagctccagg gcttcgcggg 360
ggacaaggcc ttcctcacct ccacaaggc catctgtctg gaaaccgagc tggccctgac 420
cctcatcatc ttcattctgt tcacggcctc catctctgcc tacatggccg cggcgctact 480
ggagtctctt atcacacttg ccttctctct cctctatgcc acccagtact accagcgctt 540
cgaccgaatt aactggccct gtctggactt cctgcgctgt gtcagtgcc a tcatcatctt 600
cctggtgggt tccttttgag ctgtgacctc cgggacgga gctgccattg ctgcttttgt 660
ttttggcatc atcctggttt ccattctttg cttatgatgcc tccaagatct accggactga 720
gatggcaccc gggggcagcc agggggacca gcagtgactc tggggctacc tggctcctag 780
gccagccag ccagagagga cagtggagcc cagacacgtc tccttgggat tccactagccc 840
ccagcccggc aaacgccacc ccagccctac acagcagtct ggctgagac gtcactgggg 900
acttatctgt ggagcctggg gctccaggat gtggcttctc atgaagctct ggccagagga 960
ggggaactta ttggggggagg gggggtggag ggggggaatc tggacctcta agtcattccc 1020
ataattaaaa tatc 1034
```

<210> 23
<211> 2411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1487802

```
<400> 23
ggcggggatt ggtctgtgct cctctctcgg ctccctcgcg ctcgcggcgg ccgacggttc 60
ctgggacacc tgcttgcttg gcccgtccgg cggctcaggg cttctctgct gcgctcccg 120
```

ttcgctggac ggggaagaagg gctggggccgt cccgtcccgt ccccatcggg accccaagtc 180
 gcgcgcgtga cccgtcgcag ggcgagatga gcgcggacgc agcggccggg gcgcacctgc 240
 cccggctctg ctgcctggag aagggtccga acggctacgg cttccacctg cacggggaga 300
 agggcaagtt gggccagtag atccggctgg tggagcccg ctccggggcc gagaaggcgg 360
 ggctgctggc gggggaccgg ctggtggagg tgaacggcga aaacgtggag aaggagaccc 420
 accagcaggt ggtgagccgc atccgcgcgc cactcaacgc cgtgcgcctg ctggtggtcg 480
 accccgagac ggacgagcag ctgcagaagc tcggcgtcca ggtccgagag gagctgctgc 540
 gcgcccagga agcgcgcggg caggccgagc cgccggccgc cgccgaggtg cagggggctg 600
 gcaacgaaaa tgagcctcgc gaggccgaca agagccaccc ggagcagcgc gagcttcggc 660
 ctccggctctg taccatgaag aagggtccca gtggctatgg cttcaacctg cacagcgaca 720
 agtccaagcc agggcagttc atccggtcag tggaccaga ctccccggct gaggttcag 780
 ggctccgggc ccaggatcgc attgtggagg tgaacggggt ctgcatggag ggaagcagc 840
 atggggacgt ggtgtccgc atcagggtg gcggggacga gaccaagctg ctggtggtgc 900
 acagggaac tgacgagttc ttcaagaaat gcagagtga cccatctcag gagcacctga 960
 atggtccctt ggcctgccc ttaccaaag gggagataca gaaggagaac agtcgtgaag 1020
 ccctggcaga ggcagcctt gagagcccca ggccagccct ggtgagatcc gcctccagt 1080
 acaccagcga ggagctgaat tcccaagaca gcccccaaa acaggactcc acagcgccct 1140
 cgtctacctc ctccctccgac cccatccctag acttcaacat ctccctggcc atggccaaag 1200
 agagggccca ccagaaacgc agcagcaaac gggcccccga gatggactgg agcaagaaaa 1260
 acgaactctt cagcaacctc tgagcgcctt gctgccacct agtgactggc agggccgagc 1320
 cagcattcca cccacacctt ttccctctcc ccaattactc cctgaatca atgtacaaat 1380
 cagcaccac atccccctt ttgacaaatg atttttctag agaactatgt tcttccctga 1440
 ctttagggaa ggtgaatgtg ttcccgctc cccgcagtc gaaaggagac tctgctctcc 1500
 tcctcctcac tgagtgcctc atccctaccg gtgtccctt gccaccctgc ctgggacatc 1560
 gctggaacct gcaccatgcc aggatcatgg gaccaggcga gagggcacc tgactgcaga actgcgctc 1620
 ccccatgtga taaatgggtc cagggtgat caaagaactc tgactgcaga actgcgctc 1680
 tcagtggaca ggcctctgt taccctgaga cctgtggcag acacgtcttg ttttcatttg 1740
 atttttgtta agagtgcagt attgcagagt ctagaggaat ttttgtttcc ttgattaaca 1800
 tgattttcct ggttgttaca tccaggcat ggcagtgcc tcagccttaa acttttgttc 1860
 ctactccac cctcagcga ctgggcagca cggggagggt ttggctaccc ctgcccctcc 1920
 ctgagccagg taccaccatt gtaaggaaac actttcagaa attcagctgg ttcctccaaa 1980
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacacctt ggggggggag gcccgaacc 2040
 caatttcgcc caaaagggga gtcgaaataa aatttcgggg ggcggctcgt ttaacaaccg 2100
 tcgtgacctg ggaaaaaccc ttgggtgtat acccaaagct ttaatccggc tttgaaggga 2160
 aaatcccccc cttttgggccc agatttgggg tataaatagg cgcgagaggg gccccggaac 2220
 ccgatatatgc ggcctttgcc aagaagattg ttctgcgagc agctcaattg gcgagagcgc 2280
 aagtaacggc ggaatattgc gagagggggg tataaaaatt ctttgggaag gaaaatattg 2340
 cggcgagtaa aaattttttg cgggatagaa actccaggct tcaatttttt tttgagagcg 2400
 aggggggggg g 2411

<210> 24
 <211> 1846
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 1718830

<400> 24
 gttttttttt tgtttcaggt aatcaagtga aaaaatgagc ttcatctgtg gattgcagtc 60
 tgctgctaga aaccatgttt tcttccgatt taattcactg tctaactgga gaaaatgtaa 120
 cacattagca tccacctcac ggggctgtca tcaagtacaa gttaaccata tagtaaataa 180
 gtatcaggga ctgggagtaa atcagtgtga cagggtggag tttctgcctg gaaactttca 240
 tttttatagt acttttaaca acaaaagaac aggaggcctc tcaagtacca aaagtaagga 300
 aatttggagg attaccagca aatgtactgt attggaatgat gctttttcaa gacagctgct 360
 aataaaagaa gttacagcag tccctagtgt gtcagtattg catcctctaa gccctgcttc 420
 cataagagct attaggaatt tccatacttc tccacggttt caagctgctc cggttccctc 480
 cttgttgatg attctaaacc agtacagaag ttatttgcaa tcattgtagg caggggcata 540
 aggaaatggt ggcagggcac ttctctctaa caagaaggaa gtagttaaag aaaatataag 600
 gaagaataaa tggaagctat tccctgggtt gagtagtttt ggattgctct ttgtgggtgt 660

```

ttatttttact cacctggaag taagtccaat cacaggaagg agcaagctac tattattggg 720
gaaagaacag ttcagacttt tatcggaact ggaatatgaa gcatggatgg aagaatttaa 780
aaatgatatg ctaactgaga aagatgcccg atacctggct gttaaagaag tgctttgtca 840
tctaattgaa tgcaataaag atgttccagg gatctctcag atcaattggg ttattcatgt 900
ggttgattcc ccaattatta atgccttcgt gcttccaaat ggacaaatgt ttgttttcac 960
tggtttttta aatagtgtaa ccgatattca tcaactttct ttccttctgg gccatgaaat 1020
agcacatgca gtacttgggc atgctgcaga aaaggctggc atgggttcatt tgttggattt 1080
cctaggtatg attttctca caatgatttg ggccatttgt cctcgagata gcttggcact 1140
tttgtgccag tggatacagt ctaaattgca ggagtatatg tttaatagac catacagcag 1200
aaaattggag gccgaagctg acaaaattgg actactgctt gctgcaaagg cttgtgcaga 1260
cataagagcc agttcagtggt tttggcagca aatggagtgt gttgatagcc tgcattggcca 1320
acccaagatg ccagaatggt tatctacaca cccttctcat ggcaatcgag ttgagtactt 1380
ggatagactt atacctcagg ctctcaaaat tagagagatg tgtaattgtc caccactgtc 1440
taatccagac cctcgattac tattcaaact cagcacgaag cattttcttg aagaatcaga 1500
gaaagaagac ctaaatatca cgaagaaaca gaaaatggat actcttccta ttcaaaaaca 1560
ggagcaaata ccattaacat acatagtgtg gaaaagaacg ggcagttgaa ttaaaattta 1620
tgagacacaa gatatatgaa gaatgttgca gtccttatca ttttatgtta ctttttaaaa 1680
aatgatgttt gaagtgaaaa aaaaaaggat attcaggggc aaatcatgta cattacagat 1740
attatctaaa ttcttctaga atttattttt catgaaatat tgatgtattt taatctatgt 1800
taaaatatct tcaatgagga aaatgtcaca gaataaattt atatta 1846

```

```

<210> 25
<211> 3111
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1737775

```

```

<400> 25
cggctcgagg aaatcacagg gagatgtaca gcaatggggc catttaagag ttctgtgttc 60
atcttgattc ttcaccttct agaagggggc ctgagtaatt cactcattca gctgaacaac 120
aatggctatg aaggcattgt cgttgcaatc gacccaatg tgccagaaga tgaaacactc 180
attcaacaaa taaaggacat ggtgaccag gcattctctgt atctgtttga agctacagga 240
aagcgatttt atttcaaaaa tgttgccatt ttgattcctg aaacatggaa gacaaaggct 300
gactatgtga gacaaaaact tgagacctac aaaaatgctg atgttctggg tgctgagtct 360
actctccag gtaatgatga accctacact gaggcagatgg gcaactgtgg agagaagggt 420
gaaaggatcc acctcactcc tgatttcatt gcaggaaaaa agttagctga atatggacca 480
caaggtaggg catttgctca tgagtgggct catctacgat ggggagtatt tgacgagtac 540
aataatgatg agaaattcta cttatccaat ggaagaatac aagcagtaag atgttcagca 600
ggtattactg gtacaaatgt agtaaagaag tgtcaggagg gcagctgtta caccaaaaaga 660
tgcacattca ataaagtaac aggactctat gaaaaaggat gtgagtttgt tctccaatcc 720
cgccagacgg agaaggcttc tataatgttt gcacaacatg ttgattctat agttgaattc 780
tgtacagaac aaaaccacaa caaagaagct ccaacaagc aaaatcaaaa atgcaatctc 840
cgaagcacat ggggaagtgat ccgtgattct gaggacttta agaaaaccac tcctatgaca 900
acacagccac caaatcccac cttctcattg ctgcagattg gacaaagaat tgtgtgttta 960
gtccttgaca aatctggaag catggcgact ggtaaccgcc tcaatcgact gaatcaagca 1020
ggccagcttt tctgtctgca gacagttgag ctggggctct ggggttggggt ggtgacattt 1080
gacagtgcct gccatgtaca aagtgaactc atacagataa acagtggcag tgacagggac 1140
acactcgcca aaagattacc tgcagcagct tcaggaggga cgtccatctg cagcgggctt 1200
cgatcgccat ttactgtgat taggaagaaa tatccaactg atggatctga aattgtgctg 1260
ctgacgggat ggggaagacaa cactataagt ggtgtcttta acgaggtcaa acaaagtgg 1320
gccatcatcc acacagtcgc tttggggccc tctgcagctc aagaactaga ggagctgtcc 1380
aaaatgacag gaggtttaca gacatatgct tcagatcaag ttcagaacaa tggcctcatt 1440
gatgcttttg gggcccttcc atcaggaaat ggagctgtct ctcagcgctc catccagctt 1500
gagagtaagg gattaaccct ccagaacagc cagtggatga atggcacagt gatcgtggac 1560
agcaccgtgg gaaaggacac tttgtttctt atcacctgga caacgcagcc tcccaaatc 1620
cttctctggg atcccagtg acagaagcaa ggtggttttg tagtggaaca aaacacacaa 1680
atggcctacc tccaaatccc aggcattgct aaggttggca cttggaaata cagtctgcaa 1740
gcaagctcac aaaccttgac cctgactgtc acgtcccgtg cgtccaatgc taccctgcct 1800

```

```

ccaattacag tgacttccaa aacgaacaag gacaccagca aattccccag ccctctggta 1860
gtttatgcaa atattcgcca aggagcctcc ccaattctca gggccagtgt cacagccctg 1920
attgaatcag tgaatggaaa aacagttacc ttggaactac tggataatgg agcaggtgct 1980
gatgctacta aggatgacgg tgtctactca aggtatttca caacttatga cacgaatggt 2040
agatacagtg taaaagtgcg ggctctggga ggagttaacg cagccagacg gagagtgata 2100
ccccagcaga gtggagcact gtacatacct ggctggattg agaatgatga aatacaatgg 2160
aatccaccaaa gacctgaaat taataaggat gatgttcaac acaagcaagt gtgtttcagc 2220
agaacatcct cgggagggctc atttgtggct tctgatgtcc caaatgctcc catacctgat 2280
ctcttcccac ctggccaaat caccgacctg aaggcggaaa ttcacggggg cagtctcatt 2340
aatctgactt ggacagctcc tggggatgat tatgaccatg gaacagctca caagtatatc 2400
attcgaataa gtacaagtat tcttgatctc agagacaagt tcaatgaatc tcttcaagt 2460
aatactactg ctctcatccc aaaggaagcc aactctgagg aagtcttttt gtttaaacca 2520
gaaaacatta cttttgaaaa tggcacagat cttttcattg ctattcaggc tgttgataag 2580
gtcgatctga aatcagaaat atccaacatt gcacgagtat ctttgtttat tcctccacag 2640
actccgccag agacacctag tcttgatgaa acgtctgctc cttgtcctaa tattcatatc 2700
aacagcacca ttcttggcat tcacatttta aaaattatgt ggaagtggat aggagaactg 2760
cagctgtcaa tagcctaggg ctgaattttt gtcagataaa taaaataaat cattcatcct 2820
tttttttgat tataaaattt tctaaaatgt attttagact tcctgtaggg ggcatatac 2880
taaatgtata tagtacattt atactaaatg tattcctgta gggggcgata tactaaatgt 2940
attttagact tcctgtaggg ggcgataaaa taaaatgcta aacaactggg tatacatgca 3000
taaaaactat ccattcaaac ccaaaaattt aataatcatt gagtctttta ttaatgaatt 3060
tgaatactag aaagaaacag ggcttgcac t aataaatgga agtatgagtg t 3111

```

<210> 26

<211> 4117

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1794154

<400> 26

```

taagttaccc cgatgacttg gtttggaagg ggtaaggca ccagtcaccc tcttctaaag 60
tgatttatga tgatgtgtgg agtttaaaaa ctttacccca ccccaaagaa cagccctctc 120
actcctcact gagtccactc tgaacgtgct aaaatgggaa ggaggcgggtg ttttgatgat 180
ctgttaaatt cttagtgaag tttccttgat ttccagtggc tgctgttgtt tgagtttgg 240
ttggagcaaa actgaggtag tcctaacatt tctgggactg aatccaggca agagaaagaa 300
gaaaaagaag aagaaaaaga ggaggaaaaa ggtagggaga aataaaggga ggagagaagc 360
acagtgaaaa aaaaaaaaaaag tcccttttctg acatcacatt cctgtgtttt ccctcagcct 420
ggaaaacata tgaatcccag tgctttttacg cccggaaaca aagagactaa gccagactat 480
gggggaaagg gagataagaa ggatcctgga actttaagaa gggaaagagt gagattcaga 540
aatcgccagg actggacttt aaggggacgtc ctgtgtcagc acaagggact ggcacacaca 600
gacacacgag accgaggaga aactgcagac aaatggagat acaaagactt agaaggacag 660
ctcctttcac ctcatcctac ttgtccagaa ggtaaaaaga cacagccaga aagaaaaggc 720
atcggctcag ctctcagatc aggacaggct gtggatctgt ggcgggtactc tgaaagctgg 780
agctgcagca caccctttt gtattgtcct cctcggtaa agagagagag ggctgggagg 840
aaaagtagtt catctaggaa actgtcctgg gaaccaaact tctgatttct tttgcaacct 900
tctgcattcc atctctatga gccaccattg gattacacaa tgacatggag aatgggacct 960
cgtttacta tgctgttggc catgtggcta gtgtgtggat cagaacccca ccccatgcc 1020
actattagag gcagccacgg aggacggaaa gtgcctttgg tttctccgga cagcagtagg 1080
ccagctcggt ttctgaggca cactgggagg tctcgcggaa ttgagagatc cactctggag 1140
gaaccaaacc ttcagcctct ccagagaagg aggagtgtgc ccgtgttgag actagctcgc 1200
ccaacagagc cgccagcccg ctccggacatc aatggggccg ccgtgagacc tgagcaaaga 1260
ccagcagcca ggggctctcc gcgtgagatg atcagagatg aggggtcctc agctcgggtc 1320
agaatgttgc gtttcccttc ggggtccagc tctcccaaca tccttgccag ctttgaggg 1380
aagaacagag tatgggtcat ctccagccct ctcgctcagg aaggctacta ccgctcatg 1440
atgagcctgc tgaaggacga tgtgtactgt gagctggcgg agaggcacat ccaacagatt 1500
gtgctcttcc accaggcagg tgaggaagga ggcaagggtga gaaggatcac cagcgaggggc 1560
cagatcctgg agcagcccct ggaccctagc ctcatcccta agctgatgag cttcctgaag 1620
ctggagaagg gcaagtttgg catggtgctg ctgaagaaga cgctgcaggt ggaggagcgc 1680

```

tatccatattc cccgttaggct ggaagccatg tacgagggtca tegaccaagg ccccatccgt 1740
 aggatcgaga agatcaggca gaagggtctt gtccagaaat gtaaggcctc tgggtgtagag 1800
 ggccagggtg tggcggaggg gaatgacggt ggagggggag caggaaggcc aagcctgggc 1860
 agcgagaaga agaaagagga cccaaggaga gcacaagtcc caccaaccag agagagtcgg 1920
 gtgaagggtcc tgagaaaact ggccgccact gcaccagctt tgccccaacc tccctcaacc 1980
 cccagagcca ccacccttcc tctgccccca gccacaacag tgactcgggtc cactgcccgg 2040
 gcggtaacag ttgctgcaag acctatgacc accactgcct tccccaccac gcagaggccc 2100
 tggacccccct caccctccca caggccccct acaaccactg aggtgatcac tgccaggaga 2160
 cccctcagttt cagagaatct ttaccctcca tcccgggaagg atcagcacag ggagaggcca 2220
 cagacaacca ggaggcccag caaggccacc agcttgagga gcttcacaaa tgccccctcc 2280
 accaccatct cagaaccag cacaagggtc gctggcccag gccgtttccg ggacaaccgc 2340
 atggacaggc gggaacatgg ccaccgagac ccaaatgtgg tgccagggtcc tcccaagcca 2400
 gcaaaggaga aacctcccaa aaagaaggcc caggacaaaa ttcttagtaa tgagttagag 2460
 gagaagtatg acctcagccg gctcactgcc tctcagctgg aggacgagct gcagggtggg 2520
 aatgttcccc ttaaaaaagg aaaggagtct aaaaagcatg aaaagcttga gaaaccagag 2580
 aaggagaaga aaaaaaagat gaagaatgag aacgcagaca agttacttaa gaggtaaaag 2640
 caaatgaaga agtctgagaa aaagagcaag caagagaaaag agaagagcaa gaagaaaaaa 2700
 ggaggtaaaa cagaacagga tggctatcag aaaccacca acaaacactt caccagaggt 2760
 cccaagaagt cagtggccga cctgctgggg tctttgaag gcaaacgaag actccttctg 2820
 atcactgtct ccaaggctga gaacaatatg tatgtgcaac aacgtgatga atatctggaa 2880
 agtttctgca agatggctac caggaaaatc tctgtgatca ccatcttcgg cctgtcaac 2940
 aacagcacca tgaaaatcga ccactttcag ctagataatg agaagcccat gcgagtgggtg 3000
 gatgatgaag acttggtaga ccagcgtctc atcagcgagc tgaggaaaaga gtacggaatg 3060
 acctacaatg acttcttcat ggtgctaaca gatgtggatc tgagagtcaa gcaatactat 3120
 gaggtaccaaa taacaatgaa gtctgtgttt gatctgatcg atactttcca gtcccgaatc 3180
 aaagatatgg agaagcagaa gaaggagggc attgtttgca aagaggacaa aaagcagtc 3240
 ctggagaact tccatccag gttccggtgg aggaggaggt tgctgggtgat ctctgtctct 3300
 aacgatgaag actgggccta ttcacagcag ctctctgccc tcagtgggtca ggcgtgcaat 3360
 tttggtctgc gccacataac cattctgaag cttttaggcg ttggagagga agttggggga 3420
 gtgttagaac tgttcccaat taatgggagc tctgttgttg agcgagaaga cgtaccagcc 3480
 catttggtga aagacattcg taactatctt caagtgagcc cggagtactt ctccatgctt 3540
 ctagtcgaa aagacggaaa tgtcaaatcc tgggtatcct ccccaatgtg gtccatgggtg 3600
 attgtgtacg atttaattga ttcgatgcaa cttcggagac aggaaatggc gattcagcag 3660
 tcaactggga tgcgtgccc agaagatgag tatgcaggct atggttacca tagttaccac 3720
 caaggatacc aggatgggta ccaggatgac taccgtcatc atgagagtta tcaccatgga 3780
 tacccttact gagcagaaat atgtaacctt agactcagcc agtttctctt gcagctgcta 3840
 aaactacatg tgccagctc cattcttcca cactgcgtac tacatttctt gccttttctt 3900
 ttcagtgttt ttctaagact aaataaatag caaactttca cctattcatg agttattatt 3960
 gaaacctcaa atcataaaga catttaaaag aattgttttt ctaactggag gggctctagt 4020
 gctaaataat agtactgaaa attgatatta ttttctttt cttatatgaa ggaccttatt 4080
 tggcatataa aattttataa aatatgtaaa aaaaaaa 4117

<210> 27
 <211> 2173
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2027624

<220>
 <221> unsure
 <222> 2160
 <223> a, t, c, g, or other

<400> 27
 ggcattggcg cggctatgcc gcttgctctg ctgcgtctgt tgcctctggg gcccggcgcc 60
 tgggtgcttg cagaaccccc acgcgacagc ctgcgggagg aacttgatcat cccccgctg 120
 ccttcggggg acgtagccgc cacattccag ttccgcacgc gctgggattc ggagcttcag 180
 cgggaaggag tgtccatta caggctcttt cccaaagccc tggggcagct gatctccaag 240

tattctctac gggagctgca cctgtcattc acacaaggct tttggaggac ccgatactgg 300
gggccaccct tcctgcaggc cccatcagggt gcagagctgt ggggtctggt ccaagacact 360
gtcactgatg tggataaatc ttggaaggag ctacagtaatg tcctctcagg gatcttctgc 420
gcctctctca acttcatcga ctccaccaac acagtcactc ccactgcctc cttcaaacc 480
ctgggtctgg ccaatgacac tgaccactac tttctgcgct atgctgtgct gccgcgggag 540
gtggtctgca ccgaaaacct caccctctgg aagaagctct tgcctgttag ttccaaggca 600
ggcctctctg tgctgctgaa ggagatcgc ttgttccaca ccagctacca ctcccaggca 660
gtgcatatcc gccctgtttg cagaaatgca cgctgtacta gcatctctg ggagctgagg 720
cagacctgtt cagttgtatt tgatgccttc atcacggggc agggaaagaa agactggtcc 780
ctcttccgga tgttctcccg aaccctcacg gagcctgctc ccctggcttc agagagccga 840
gtctatgtgg acatcaccac ctacaaccag gacaacgaga cattagaggt gcaccaccc 900
ccgaccacta catatcagga cgtcatccta ggactcggga agacctatgc catctatgac 960
ttgcttgaca ccgccatgat caacaactct cgaaacctca acatccagct caagtggagg 1020
agacccccag agaattgagg cccccagtg cccttctgct atgccagcg gtactgtagt 1080
ggctatgggc tgcagaaggg ggagctgagc acactgctgt acaaacacca cccataccgg 1140
gccttcccggt tgctgctgct ggacaccgta ccctgggtatc tgcggctgta tgtgcacacc 1200
ctcaccatca cctccaaggg caaggagaac aaaccaagt acatccacta ccagcctgcc 1260
caggaccggc tgcaacccca cctcctggag atgctgattc agctgccggc caactcagtc 1320
accaaggttt ccattccagt tgagcggggc ctgctgaagt ggaccgagta cagccagat 1380
cctaaccatg gcttctatgt cagcccatct gtctcagcg cccttggtgc cagcatggta 1440
gcagccaagc cagtggaact ggaagagagt cccctcttca acagcctgtt cccagtctct 1500
gatggctcta actactttgt gcggctctac acggagccgc tgctggtgaa cctgccgaca 1560
ccggacttca gcatgcccta caacgtgatc tgcctcacgt gcactgtggt gcccggtgct 1620
tacggctcct tctacaatct cctcacccga acctccaca tcgaggagcc ccgcacaggt 1680
ggcctggcca agcggctggc caaccttate cggcgcgccc gaggtgtccc cccactctga 1740
ttcttgcctt ttccagcagc tgcagctgcc gtttctctct ggggagggga gcccaagggc 1800
tgtttctgcc acttgcctc ctcagagttg gcttttgaac caaagtgtcc tggaccaggt 1860
cagggcctac agctgtgttg tccagtacag gagccacgag ccaaagtgtg catttgaatt 1920
tgaattaact tagaaattca tttcctcacc tgtagtggcc acctctatat tgaggtgctc 1980
aataagcaaa agtggtcggt ggctgctgta ttggacagca cagaaaaaga tttccatcac 2040
cacagaaagg tccgctggca gcactggcca aggtgatgg gtgtgtctaca cagtgtatgt 2100
cactgtgtag tggatggagt ttactgtttg tggataaaaa acggctgttt ccgtgaaan 2160
aaaaaaaaa agg 2173

<210> 28
<211> 1209
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2057213

<220>
<221> unsure
<222> 94, 116, 1098, 1133, 1151, 1162, 1187, 1195, 1205
<223> a, t, c, g, or other

<400> 28
ccggggacgc ggggtcaggc caccgcgttg gcaggccgct gcaggtaggc aagccccac 60
caggcgccat ggactggaag acactccagg ccnnaatgag cccccaaac aagtantcca 120
cagcgttcgg gcgcatctgg ctgtccgtgg tgttcgtctt ccgggtgctg gtatacgtgg 180
tggctgcaga gcgctgtggt ggggatgagc agaaggactt tgactgcaac accaagcagc 240
ccggctgcac caacgtctgc tacgacaact acttcccat ctccaacatc cgcctctggg 300
ccctgcagct catcttctgc acatgcccc cgtctgtggt catcctgcac gtggcctacc 360
gtgaggagcg ggagcgccgg caccgccaga aacacgggga ccagtgcgc aagctgtacg 420
acaacgcagg caagaagcac ggaggcctgt ggtggacctt cctgttcagc ctcatcttca 480
agctcatcat tgagttctc ttctctacc tgcctgcac tctctggcat ggcttcaata 540
tgccgcgcct ggtgcagtgt gccaatatgg cccctgccc caacctcgtg gactgtctaca 600
ttgcccgacc taccgagaag aaaatcttca cctacttcat ggtgggcgcc tccgcgctct 660
gcacgtact caccatctgt gagctctgct acctcatctg ccacagggtc ctgcgaggcc 720

PF-0489-1 CON

```
tgcacaagga caagcctcga gggggttgca gcccctcgtc ctccgccagc cgagcttcca 780
cctgcccgtg ccaccacaag ctgggtggagg ctgggggaggt ggatccagac ccaggcaata 840
acaagctgca ggcttcagca cccaacctga ccccatctg accacagggc aggggtgggg 900
caacatgcgg gctgccaatg ggacatgcag ggcggtgtgg caggtggaga ggctctacag 960
gggctgagtg accccactct gagttcacta agttatgcaa ctttcgtttt ggcagatatt 1020
ttttgacact ggggaactggg ctgtctagcc ggttataggt aaccacagc cccagtgcc 1080
gccctcaaag gacatagnct tttgaaacaa gcgaattaac taccctaagc tgnctgcaaa 1140
ggggcaacta ngggcactgt angcaaggct ttaaccaagg aaggggntca acccnaggaa 1200
aggngtgtt 1209
```

<210> 29
<211> 653
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2073804

```
<400> 29
actcgagcga attcggtctg aggaaaccca gcaggcggcg aagatggcgg agaacagcgg 60
tcgcgccggc aagagcagcg ggagcggcgc ggggaagggg gcggtgtccg cagagcaggt 120
gattgctggc ttcaaccgcc ttccggcagga acagcgaggc ctggcatcca aagcagctga 180
gttgagagatg gagttgaatg agcacagcct agtgatcgat acactgaagg aggtagatga 240
aactcgtaag tgctaccgca tgggttgagg agtgctggg gagcgaactg tcaaagaggt 300
gctgcccgtc ttggagaaca acaaggagca gatacagaag atcattgaga cactgacaca 360
gcagcttcag gcaaagggaa aagaactaaa tgaattccgg gaaaagcaca acattcgtct 420
catgggagaa gatgagaagc cagcagccaa ggaaaactca gaaggggctg gggctaaggc 480
cagctcagct ggagtgttgg tctcctaggg accaaggcct ttgcattttt ttctaccctg 540
actcccactt ctaattttctc tttattgtta ttattattat tttctctgct attgtaatat 600
ttttttgtta attaaatgtt ttggtcagaa aaaaaaaaaa aaaaaaaaaa agg 653
```

<210> 30
<211> 1632
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2175401

```
<400> 30
ttgcagtagt gttagactga agataaagta agtgctgttt gggctaacag gatctcctct 60
tgcagctctg agcccaggac gctgattcca gcagcgccct accgcgcacc cgaagattca 120
ctatggtgaa aatcgccctc aataccccta ccgccgtgca aaaggaggag gcgcggcaag 180
acgtggaggc cctcctgagc cgcacggtca gaactcagat actgaccggc aaggagctcc 240
gagttgccac ccaggaaaaa gagggctcct ctgggagatg tatgcttact ctcttaggcc 300
tttcattcat cttggcagga cttattgttg gtggagcctg catttacaag tacttcatgc 360
ccaagagcac catttaccgt ggagagatgt gcttttttga ttctgaggat cctgcaaatt 420
cccttcgttg aggagagcct aacttcctgc ctgtgactga ggaggctgac attcgtgagg 480
atgacaacat tgcaatcatt gatgtgcctg tccccagttt ctctgatagt gaccctgcag 540
caattattca tgactttgaa aagggaatga ctgcttacct ggacttggtg ctggggaact 600
gctatctgat gcccctcaat acttctattg ttatgcctcc aaaaaatctg gtagagctct 660
ttggcaaaact ggcgagtggc agatatctgc ctcaaaacta tgtggttcga gaagacctag 720
ttgctgtgga ggaaattcgt gatgttagta accttggcat ctttattttac caactttgca 780
ataacagaaa gtccttcctc cttcgtcgca gagacctctt gctgggtttc aacaaacgtg 840
ccattgataa atgctggaag attagacact tccccaacga atttattgtt gagaccaaga 900
tctgtcaaga gtaagaggca acagatagag tgtccttggg aataagaagt cagagattta 960
caatatgact ttaacattaa ggtttatggg atactcaaga tatttactca tgcatttact 1020
ctattgctta tgcttttaaa aaaggaaaaa aaaaaaaaaa tactaaccac tgcaagctct 1080
tgtcaaattt tagtttaatt ggcattgctt gtttttttga actgaaatta catgagttcc 1140
```

PF-0489-1 CON

```
atctttttctt tgaatttata ggggttagat ttctgaaagc agcatgaata tatcacctaa 1200
catcctgaca ataaattcca tccgttggtt tttttgtttg tttgtttttt cttttccttt 1260
aagtaagctc tttattcatc ttatgggtgga gcaattttta aatttgaaat attttaaatt 1320
gtttttgaac tttttgtgta aaatataatca gatctcaaca ttgttggttt cttttgtttt 1380
tcattttgta caactttctt gaatttagaa attacatctt tgcagttctg ttaggtgctc 1440
tgtaattaac ctgacttata tgtgaacaat tttcatgaga cagtcatttt taactaatgc 1500
agtgattctt tctcactact atctgtattg tggaaatgcac aaaatttgtt aggtgctgaa 1560
tgctgtaagg agtttaggtt gtatgaattc tacaacctaa taataaattt tactctatac 1620
aaaaaaaaaa aa 1632
```

<210> 31
<211> 1175
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2741580

<220>
<221> unsure
<222> 959
<223> a, t, c, g, or other

```
<400> 31
cgggtgccgga ggcgcgagcag agcggagacc cccaggctct gcggggcgcg aatatacctgg 60
aacctttcttt tgtttgtcag cagccaaggt gtttccagga agttcagaga gaacagaatt 120
taagaagtgc aacatggcca ggggccgcct ctgctgcttg aagtacatga tgttctctct 180
caatttgata ttctggctct gtggctgtgg gctgctggga gtgggcatct ggctctccgt 240
gtcccaaggc aactttgcca ccttctcccc cagcttccct tcgttggttg cagccaacct 300
ggtcattgcc ataggcacca ttgtcatggt gacgggcttc ctggtgctgc tggggggccat 360
caaggaaaac aagtgcctcc tctcagctt tttcatcgtc ctgttggtca tctctctagc 420
agagctgata ttactcatcc tcttctttgt ctacatggac aagggtgaacg agaacgccaa 480
gaaggacctg aaggaaggcc tgctgctgta ccacaccgag aacaacgtgg ggctgaagaa 540
cgcttggaac atcatccagg ctgagatgct atgctgtggt gtcactgact acacagactg 600
gtaccagtg ctgggggaga acacgggttc cgaccgctgc tgcattggaga actcccaggg 660
ctgcggggcg aacgccacca cgcttttgtg gagaacgggc tgctatgaaa aggtgaagat 720
gtggttcgat ggcaataagc acgtgctggg cgcggtgggg atgtgcatcc tcatcatgca 780
gatcctgggc atggccttct ccatgacctt cttccagcac atccaccgga ctggtgaagaa 840
gtacgacgca tgagcgggct ggccgggagt gcccaccccg cctgctgctc ctgtggaggg 900
aagacgattg agcttttgtt cgcttgcttg cgctctccag atatgatccc tgcacccanc 960
ccccacagcc tgccctaccc cacctaccct gcctcagccc tcggacttct caagtgggtg 1020
gagtggcaag ggagcgacga ggcacatcgg cagacctggg ggctcggggg ccccttgga 1080
tttccctgct atctgcataa atgcgtattt tgccaaaatg accgacaggg ctgggggctcg 1140
gggttccgct cttggaggga atcccccggt caatt 1175
```

<210> 32
<211> 2358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2779610

```
<400> 32
tctcagttgt ggacgctcgt aagttttcgg cagtttccgg ggagactcgg ggactccgct 60
tctcgctctc tgtgttccaa tcgcccgggt cgggtggtgca ggggtctcgg ctagtcatgg 120
cgtccccgct tcggagactg cagactaaac cagtcattac ttgtttcaag agcgttctgc 180
taatctacac ttttattttc tggatcactg gcgttatcct tcttgagtt ggcatattgg 240
gcaagggtgag cctggagaat tactttttct ttttaaataa gaaggccacc aatgtccctc 300
```



```

tcgtgctcat tgctactggt accgtcatta ttcttttggg cacccttggg tgttttgcta 360
cctgccgagc ttctgcattg atgctaaaaac tgtatgcaat gtttctgact ctcggtttttt 420
tggtcgaact ggtcgctgcc atcgtaggat ttgttttcag acatgagatt aagaacagct 480
ttaagaataa ttatgagaag gctttgaagc agtataactc tacaggagat tatagaagcc 540
atgcagtaga caagatccaa aatacgttgc attgttgtgg tgtcaccgat tatagagatt 600
ggacagatac taattattac tcagaaaaag gatttcttaa gagttgctgt aaacttgaag 660
attgtactcc acagagagat gcagacaaag taaacaatga aggttgtttt ataaaggtga 720
tgaccattat agagtcagaa atgggagtcg ttgcaggaaat ttcccttggg gttgcttgct 780
tccaactgat tggaatcttt ctgcctact gcctctctcg tgccataaca aataaccagt 840
atgagatagt gtaacccaat gtatctgtgg gcctattcct ctctaccttt aaggacattt 900
aggggtcccc ctgtgaatta gaaagtgtct tggctggaga actgacaaca ctacttactg 960
atagacccaa aaactacacc agtaggttga ttcaatcaag atgtatgtag acctaaaact 1020
acaccaatag gctgattcaa tcaagatcgg tgctcgagc gggctgattc aatcaagatg 1080
tatgtttgct atgttctaag tccaccttct atcccattca tgttagatcg ttgaaacctt 1140
gtatccctct gaaacactgg aagagctagt aaattgtaaa tgaagtaata ctgtgttctt 1200
cttgactggt atttttctta gtagggggcc tttggaaggc actgtgaatt tgctattttg 1260
atgtagtgtt acaagatgga aaattgatct ctctgacttt gctattgatg tagtgtgata 1320
gaaaattcac ccctctgaac tggctccttc ccagtcaagg ttatctgggt tgattgtata 1380
atgtgcacca agaagttaaa atgttttatg actctctgtt ctgctgacag gcagagagtc 1440
acattgtgta atttaatttc agtcagtcac tagatggcat ccctcatcag ggttgccaga 1500
tggtgataac agtgtaaggc cttgggtcta aggcattcac gactggaagg gactactgat 1560
gttctgtgat acatcagggt tcagcacaca acttacattt ctttgcctcc aaattgaggt 1620
atgtattatg atgttcatac ttccctctct gtttgaaagt ttctaattat taaatggtgt 1680
cggaattggt gtattttcct taggaattca gtggaactta tcttcattaa atttagctgg 1740
taccagggtg atatgacttg tcaatattat ggtcaacttt aagtcttagt tttcgtttgt 1800
gcctttgatt aataagtata actcttatac aataaatact gctttcctct aaaaagatcg 1860
tgtttaaatt aacttgtaga aaatctgctg gaattggtgt tgttttccac tgagaaagct 1920
aagccctaca tttctattca gactactgtt ttttagatgtg aaatataagc ctgcggcctt 1980
aactctgtat taaaaaaaat gtttttgttt aaaaaaaact gttcccatag gtgcagcaaa 2040
ccaccatggc acatgtatac ctatgtaaac aacctgcaca ttctgcacat gtatcccaga 2100
acttaatgta aacaaaaaaa tcttaaagtg caaatattaa aaaaaactgt tctctgtgaa 2160
aaaaattata ttccatgtta taaagtagca tatgactagt gttctcctag agatcagact 2220
tttttgattg tatagtttgc attaaaaagt tgtacaggga gggatgtaac ctgtatcttc 2280
aggataatag ggaaattaat aaggaaaata ataattacta aaatttgagt tgaagtcagg 2340
gaaaaaaaaa aaaaaaaa 2358

```

<210> 33
 <211> 1573
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2879792

```

<400> 33
gctgtgcggc ctctcgcggg gccgacgtca gccgagcagc tccccacgt cctctccttc 60
tcgccactta ttatttatcc gttttcccaa agaagcgact agggacccaa gtttaaaaaat 120
tctccccccc acccaatgcg agacgtggcc agatcccatc caacacacgg tttaatcttc 180
atggggctct gggatcaaaa gaacagaaac agcaacaaca aaagcccagc cgctgtctga 240
ttttaagctg gcaaagtggg aaaaataaag tgttgagtaa acagaccaag ttggatcatg 300
gggaatttca gaggtcatgc cctccctgga acctctcttt ttattattgg tctttgggtg 360
tgtacaaaga gtattctgaa gtatatctgc aaaaagcaaa agcgaacctg ctatcttggg 420
tccaaaacat tattctatcg attggaaatt ttggagggaa ttacaatagt tggcatggct 480
ttaactggca tggctgggga gcagtttatt cctggagggg cccatctgat gttatatgac 540
tataaacaag gtcactggaa tcaactcctg ggtctggcatc atttcaccat gtatttcttc 600
tttgggctgt tgggtgtggc agatatctta tgtttacca tcagttcact tctgtgtctc 660
ttaaccaagt taatgttgtc aaatgcctta tttgtggagg cttttatctt ctacaaccac 720
actcatggcc gggaaaatgct ggacatcttt gtgcaccagc tgcgtgtttt ggtcgtcttc 780
ctgacaggcc tcgttgctt cctagagttc cttgttcgga acaatgtact tctggagcta 840
ttgcggtcaa gtctcattct gcttcagggg agctggttct ttcagattgg atttgtctct 900

```

PF-0489-1 CON

```
tatcccccca gtggagggtcc tgcattgggat ctgatggatc atgaaaaatat tttgtttctc 960
accatatgct tttgttggca ttatgcagta accattgtca tcgttgggaat gaattatgct 1020
ttcattacct ggttgggttaa atctagactt aagaggctct gctcctcaga agttggactt 1080
ctgaaaaatg ctgaacgaga acaagaatca gaagaagaaa tgtgactttg atgagcttcc 1140
agtttttcta gataaacctt ttctttttta cattgttctt ggttttgttt ctcgatcttt 1200
tgtttggaga acagctggct aaggatgact ctaagtgtac tgtttgcatt tccaatttgg 1260
ttaaagtatt tgaatttaaa tattttcttt ttagctttga aaatattttg ggtgatactt 1320
tcattttgca catcatgcac atcatggtat tcaggggcta gagtgatttt tttccagatt 1380
atctaaagtt ggatgccac actatgaaag aaatatttgt tttatttggc ttatagatat 1440
gctcaagggt actgggcttg ctactatttg taactccttg accatggaat tatacttgtt 1500
tatcttggtg ctgcaatgag aaataaatga atgtatgtat tttggtgcag actaaaaaaa 1560
aaataaaaaa gcc 1573
```

<210> 34

<211> 929

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3231062

<400> 34

```
gtgcgggctt ggggactggg gateccgcgc cggggccgca gcatggggcg cttccgcggg 60
ggcctgcggt gcatcaagta cctgctgctt ggcttcaacc tgctcttctg gctggctgga 120
tcggccgtca ttgcttttgg actatggttt cggttcggag gtgccataaa ggagttatca 180
tcagaggaca agtccccaga gtatttctat gtggggctgt atgttctggt tggagccggg 240
gccctgatga tggccgtggg gttcttcggg tgctgcggag ccatgcggga gtcgcaatgt 300
gtgcttggat ctttttttac ctgcctcctg gtgatatttg ctgctgaagt aaccactgga 360
gtatttgctt ttataggcaa gggggtagct atccgacatg ttcagaccat gtatgaagag 420
gcttacaatg attaccttaa agacagggga aaaggcaatg ggacactcat caccttccac 480
tcaacatttc agtgctgtgg aaaagaaagc tccgaacagg tccaacctac atgccccaaag 540
gagcttctag gacacaagaa ttgcatcgat gaaattgaga ccataatcag tgtaagctc 600
cagctcattg gaattgtcgg tattggaatt gcaggtctga cgatctttgg catgatattc 660
agcatggtcc tctgctgtgc gatacgaaac tcacgagatg tgatatgaag ctacttctac 720
atgaaaattg caatctaaag ctttcatacc aaatgtcaca ggagctgtct cccagctcat 780
ttttaacact gaaatgacat taggatctaa aataatttgc tgtcaattgt acatttgcac 840
gagtacgtat gtttggctca ttactggttt accccttgag tgaatgcctg tttatgatga 900
ctgagagcat attcatgtgt gatctgcgt 929
```